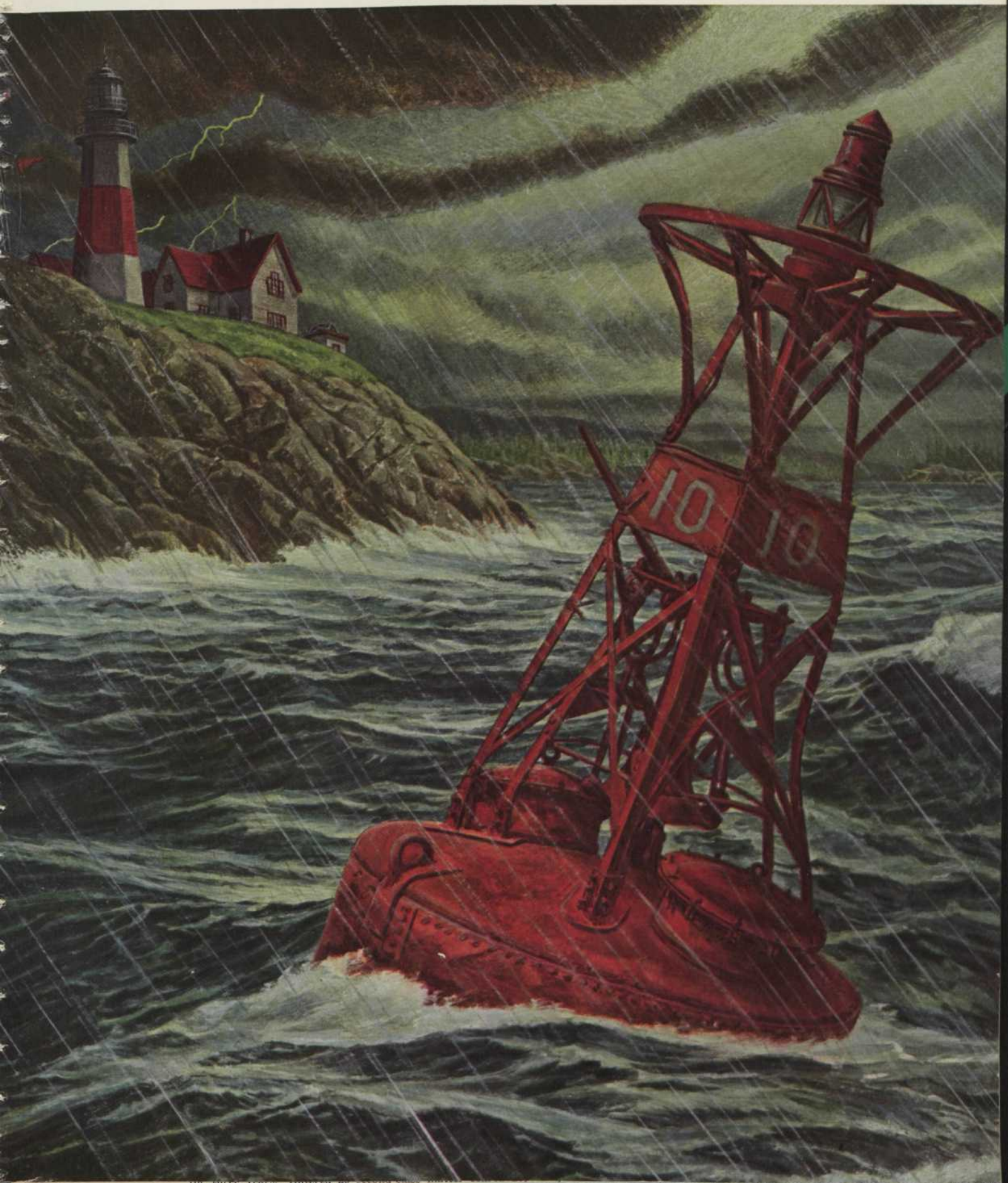


Nation's

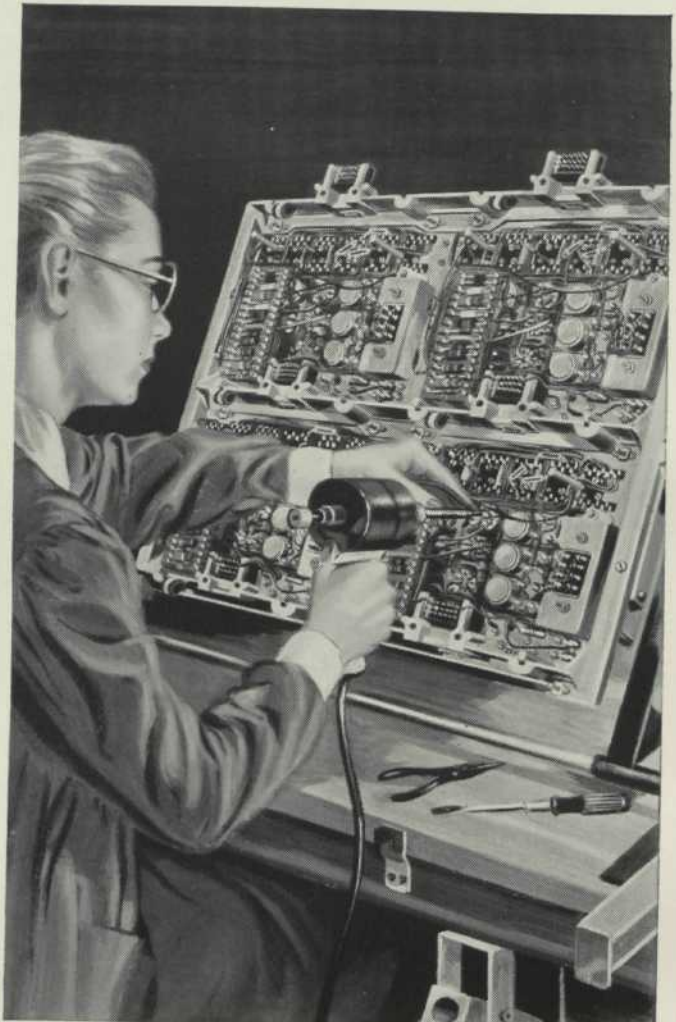


BUSINESS

A GENERAL MAGAZINE FOR BUSINESSMEN



"Look-alikes?"



...yes, but one directs guns, the other directs telephone calls!

Each of these units of electronic equipment is important to national defense in its own way. Together they symbolize the double-barrelled defense job being done by Western Electric — the manufacturing unit of the Bell Telephone System for the past seventy years.

With the help of thousands of sub-contractors, large and small — located in all parts of the country — we're turning out special military

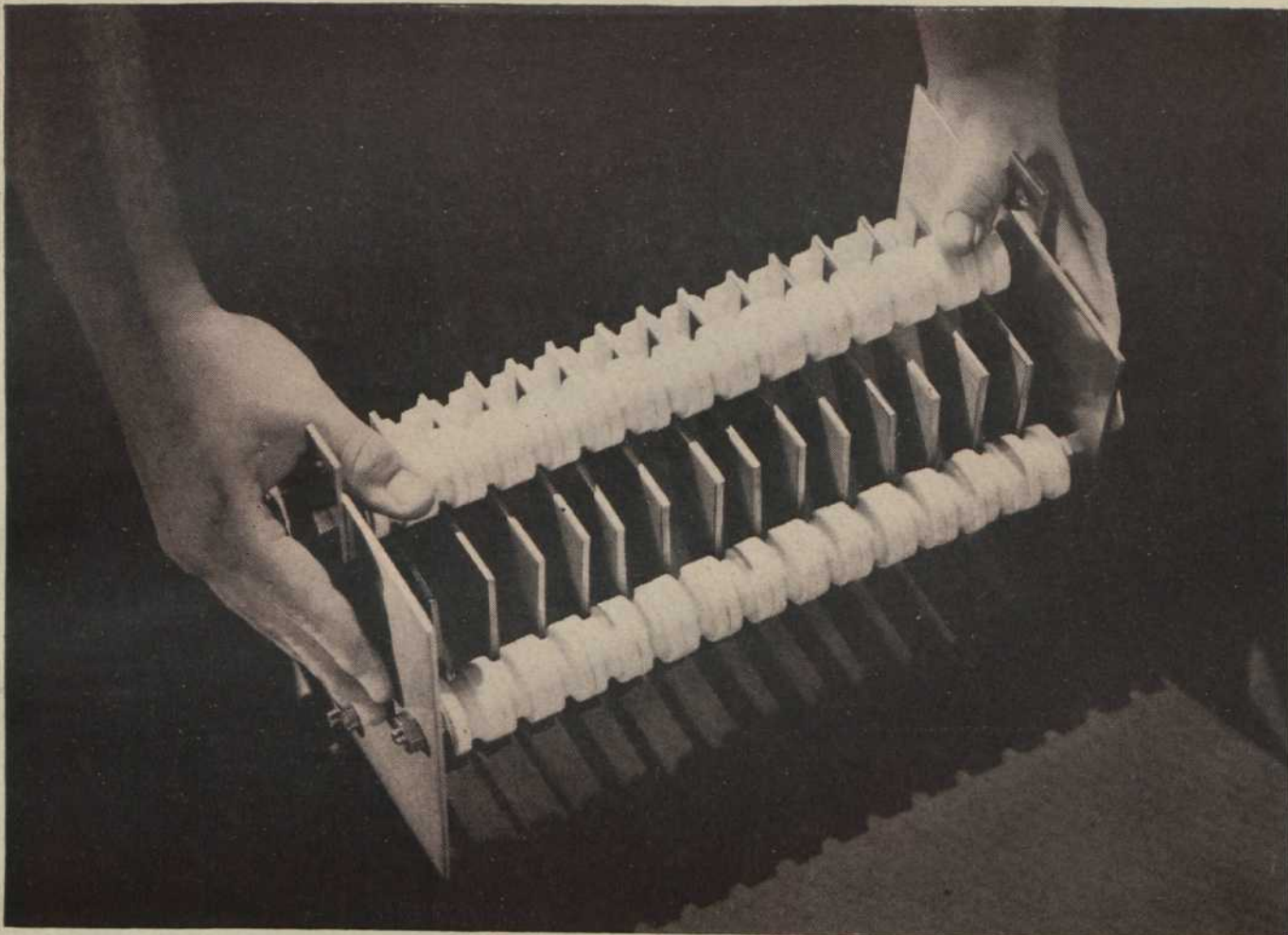
communications and electronic equipment for the Armed Forces. For example: a radar fire control system for anti-aircraft guns, a part of which is seen in the left-hand picture.

Naturally, we're also busy on our regular job of making telephone equipment — such as the dial switching unit at the right — to help keep the Bell telephone network going and growing in the nation's service.

Western Electric



MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM



Steel guinea pig about to have a breakdown

● We've come a long way toward licking the No. 1 enemy of steel—corrosion.

At United States Steel, for example, we've learned a lot through exposure tests, equipment service trials, accelerated laboratory tests, and the like. But there's just one way to be sure which grade of steel will give the longest service per dollar of cost on any given job: *try it under actual operating conditions.*

That's where the steel "guinea pigs" come in. Those expendable corrosion test racks are made up from a dozen or more different grades of steel separated by porcelain insulators that prevent galvanic action. We actually put the "guinea pigs" right into the operating equipment that contains corrosive liquids or gases. Then, when the steel specimens have been exposed to the service conditions for predetermined periods of time, we remove the guinea pigs, send them to the laboratory and determine the

most economical steel for that particular service. To our way of thinking, this is the most accurate way to decide what grade of steel is the best buy for a particular installation.

Actual on-the-job corrosion tests like these have saved many thousands of dollars for refineries, textile and paper mills, food processing plants and other manufacturers to whom corrosion is an expensive headache. For these users, the cost of steel replacement has been lowered; and our customers have had fewer hours of lost production time due to corrosive failure.

This guinea pig test is typical of the many and varied research projects sponsored by United States Steel to help you get the most out of the steel you use. We invite you to make use of our facilities to help solve any problem you may have involving the more efficient use of steel. Simply write to United States Steel, Room 2804D, 525 William Penn Place, Pittsburgh 30, Pa.



UNITED STATES STEEL

One beep will do it. Tons of truck will ease lightly and politely to the right for you to go by.

Day and night it happens, hundreds and hundreds of times. Because the men who pilot America's truck fleets are the finest drivers on the road, they are, also, the safest, the most courteous.

The many reasons for this stem from intensive company training, plus the strong sense of responsibility that is native to America's trucking industry. As it has grown in scope and service, it has grown in dependability. The trucks now go on schedule, night and day, good weather and bad. Over the highways or through the streets, they carry most of the food to your table. Carry the table, too.



just blow your horn

The trucks have revolutionized industry, brought the treasures of farm and factory to you. Give the boys the high sign as you go by. They've earned it.

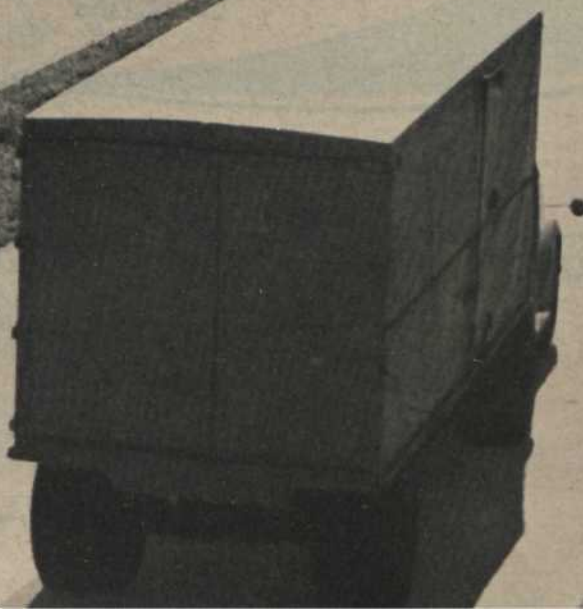
How well they've earned their laurels, the transportation people at the Chamber of Commerce of the United States could tell you in finer detail than this. It's the Chamber's business to work closely with and for all forms of transportation; truck and train, ship and plane, for the welfare of better business and in the public interest.

The open doors of these transportation specialists are just down the hall from the editorial offices of Nation's Business. The editors, therefore, have sources of information that make Nation's Business authoritative, timely and interesting to its 800,000 subscribers. Their readership and respect, in turn, make Nation's Business productive for its advertisers.

mass coverage of business management



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TELEPHONE 111

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BELLEVILLE, ONTARIO



January 28, 1952

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Five months have elapsed since the close of the Business Engineering Installation in our company, and we are indeed pleased to express our gratification with the results shown to date.

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The Organization Plan which was installed has developed a new spirit of harmony and co-operation, and I, personally, found it particularly beneficial since I am no longer bothered with minor details. Now that our key-men are trained to operate their own departments on a profitable basis we are all working towards a common goal, and are being compensated accordingly.

The proven results of engineering services rendered by your organization has certainly demonstrated the soundness of the investment there-in.

Very truly yours,
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President

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nation's business

PUBLISHED BY
CHAMBER OF COMMERCE OF THE UNITED STATES

AUGUST 1952 VOL. 40 NO. 8

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a general magazine for businessmen

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As the official magazine of the Chamber of Commerce of the United States this publication carries notices and articles in regard to the Chamber's activities; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

Nation's Business is published monthly at 1615 H St. N.W., Washington 6, D. C. Subscription price \$18 for three years. Printed in U. S. A.

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ABOUT THIS ISSUE

THE TURBULENT swell of the sea, the threat and movement in the sky. . . . Yet ever present and eternally vigilant are the colorful buoy and light-house that help keep the sea lanes safe.

These are the words PAUL RABUT used to tell why he welcomed the opportunity to paint the New England coastal scene that is this month's cover.



"It was another chance, too," he added, "to work in cooperation with the U. S. Coast Guard, who were ever ready with help and technical advice . . . to make the painting accurate."

A busy illustrator for magazines and business corporations, Rabut has received a number of awards for his art. Among them was the Art Directors' Medal for a Daniel Boone illustration in the *Saturday Evening Post*. Now 38, Rabut lives in Westport, Conn.

ABOUT 50 years ago Lionel Barrymore took a walk in the country. As he was trudging along a hot road, a young man in a buggy gave him a lift and the two became fast friends.

Nearing the edge of Gainesville, the Texan (probably not a native) squirmed and asked Lionel if he would mind walking the rest of the way. He would be ruined socially, he explained, if he were seen with an actor.

Now, in this city of 11,246, nearly everyone is in show business. Though not a professional circus town, Gainesville owns \$75,000 worth of circus equipment, including a new elephant, and a \$10,000 big top. The Gainesville Community Circus features a judge as a clown, housewives on the flying trapeze, and school girls doing death-defying flips on broad-beamed horses. They have performed for more than 500,000 spectators.



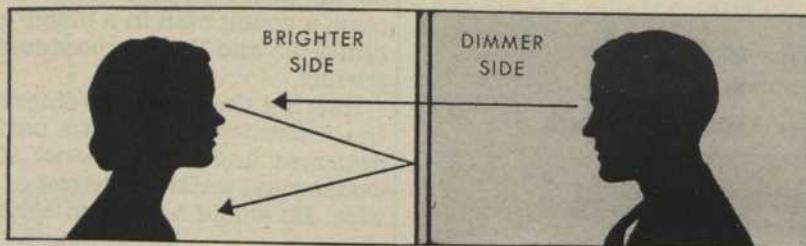
CAMERON SHIPP, who wrote "Three-Ring Town in Texas," for this issue, says the Gainesville *Register* has been searching for the man who put Barrymore out, but without luck. The publisher, Clarence H. Leonard, not one to let a



The pupils see a mirror ...



observers see the pupils



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person down, says if no one else comes forward he will confess to being the buggy driver.

Shipp, between naps, wrote Lionel's biography, "We Barrymores," which ran in the *Saturday Evening Post* and subsequently became a best seller. The author describes himself as "a large man on a diet." Tassie, his 13-year-old daughter, decided to make herself more attractive to junior high school men. "It worked out just fine: She lost ten pounds and I lost 26."

The awesome facts of his newspaper, literary and movie-writing career are recorded in "Who's Who." He lives in California. His hobby is sleeping.

WHEN FRANK J. TAYLOR set out to tell how "California Moves the Rain," he knew what he was getting into. He admits being "a water expert, having drilled and dug and paid for four wells on our place, which is in the foothills on the west side of the Santa Clara Valley, one of the spots in California which needs more rain."



Three of these wells were dust-ers. The other is "an old-fashioned dug well into which some moisture seeps."

His ambition is "to move this moisture to a family orchard, a vegetable garden, and some lawn and flower gardens surrounding our house, which is a couple hundred feet up the hill."

In this way Taylor is personally fitted to describe the business of the "greatest river movers on earth." Water, important not only to Taylor's gardening, is the "No. 1 business in the Golden State."

SOME time ago the Long Island Duck Growers' Marketing Corporation realized there were 4,000,000 birds in refrigerators, with a new production year (5,000,000) approaching. It was clear that this would cause a problem.

Not for the New York State Department of Commerce, though, which spoke a few words to the nation about the high vitamin content of Long Island ducks, and the "economy, deliciousness and ease of cooking." Some 2,000,000 birds were moved before the new crop started.

The slogan of this state agency is "New York means business." Coping with the largest and "most

heterogeneous population" in the union and the "highly diversified upstate" area, this "government by grease gun" plan gets things done, just as it did with the ducks. Operating on the theory that "modern competition is as much between communities as between individuals," this department has "lubricated" problems of such diverse nature as zoning, customer relations and off-season employment. **J. C. FURNAS**, no **NATION'S BUSINESS** newcomer, describes this agency, in "Albany's Way of Making Hay," on page 35.

IF YOU scoff at planting potatoes according to the moon, you can stop. This so-called backwoods notion is correct.

Another thing. Heavy rainfall is not good for some plants.

And tomato plants, the same variety, grown under identical conditions except for temperature, might range from 18 inches to seven feet. Strawberries are bigger and sweeter if the temperature is cool. Cooler nights increase the sugar content of beets. Smog retards lettuce.

VICTOR BOESEN lived on a farm in Indiana the first 19 years of his life without knowing these things. He might not know them now if he hadn't written "Atomic Age Greenhouse" on page 26.

Boesen was "decontaminated" and dressed like a surgeon when he went into the \$500,000 Earhart Plant Research Laboratory of the California Institute of Technology at Pasadena to find out how science is pinning down the mysteries of plant life and environment.

He found out in this supergreenhouse that science can produce all the food the world needs—if ways to distribute it can be found.

A University of Missouri man, Boesen has written for the *Saturday Evening Post*, *Collier's*, *Coronet*, *Esquire* and *Skyways* (he's an aviation expert). He covered the final year of the Pacific war and went ashore with the Marines at Yokosuka.

He occupied a forward turret of the Missouri for the formalities of Sept. 2, 1945, and remained in Japan for a year of occupation.

ONE writer whose typewriter needs a cooling system is **PAT FRANK**, author of this month's fiction, "The Fish That Spoke English." His



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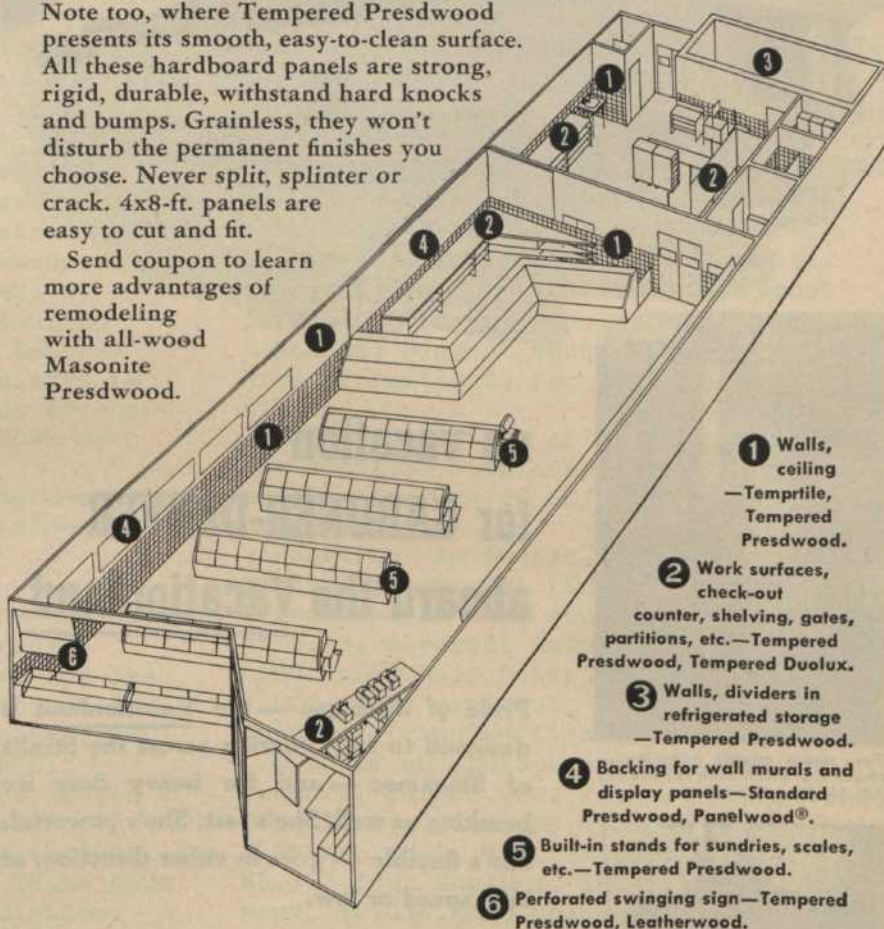
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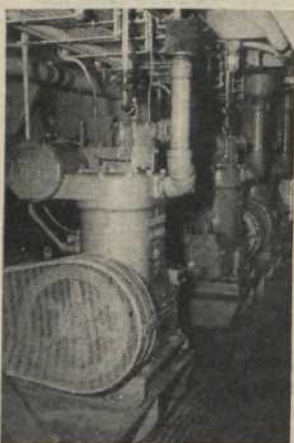
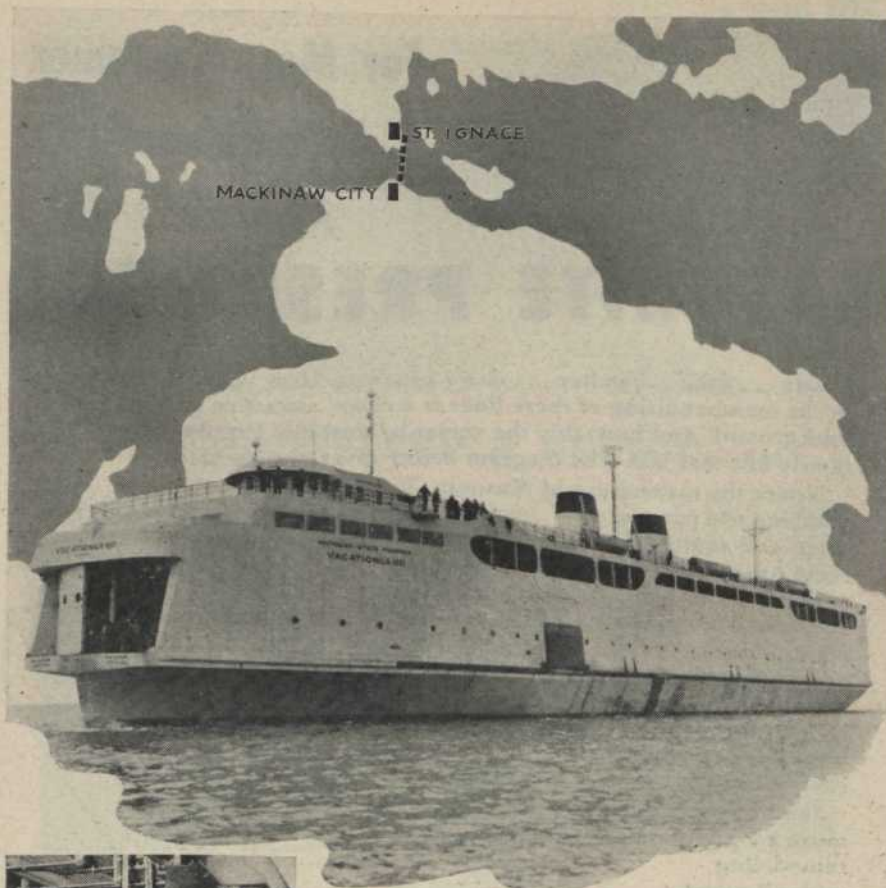
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For dead ship starting—this Gardner-Denver Model ADD Air Compressor.

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Pride of Michigan—the Vacationland is designed to ferry tourists across the Straits of Mackinac—and for heavy duty ice breaking as well. She's fast. She's powerful. She's flexible—goes in either direction, at high speed or low.

Because of her unusual flexibility—her four main diesel engines and three auxiliary diesels are started often. And every call for compressed air to start these diesels is answered—without fail—by her Gardner-Denver Air Compressors. Gardner-Denver Company, Quincy, Illinois.

SINCE 1859

GARDNER-DENVER

THE QUALITY LEADER IN COMPRESSORS, PUMPS AND ROCK DRILLS

most recent book is "Hold Back the Night," about Korea. Earlier books are "Mr. Adam" and "An Affair of State." As a war correspondent, his dispatches came from all over the world. He's back in Europe now.

KARL MARX 100 years ago declared that Russia was capable of anything as long as others "are capable of nothing." Some of the nation's efforts to limit the Russian bear's capability are told by **ARTHUR D. MORSE**, author of "Navy Polishes Its Brass."

This is the story of the U. S. Naval War College, started in 1884. Like the Navy's big guns of today and yesterday, tomorrow's strategists are being trained there. Men of all armed services, prominent civilian scientists and State Department officials attend this oldest postgraduate service school in America.

The author recently won two national awards for a *McCall's* article on schools. One was given by the Education Writers Association, which called it "the best article on education appearing in a magazine of general circulation during 1951." The second award, given by Sigma Delta Chi, journalism fraternity, named the piece as the best magazine article of the year.

ROBERT OSBORN, whose delightful illustrations decorate Laurence Greene's article, "Are You Your Favorite Author?" drew some 2,000 small posters and 1,800 cartoons for the U. S. Navy during World War II—mostly to show how to save life and limb in naval aviation.

A cartoon book, "War Is No Damn Good," rang a high score in 1946. Now Osborn is kept busy illustrating stories in national magazines and lives in an old farmhouse at Salisbury, Conn.

JUMBINA, the elephant on our July cover, is dead.

But, true to her 40 years in show business, she fulfilled her final obligation. Although sick she managed a pose of robust power while Robert Riggs was painting her picture. Afterward, in spite of arthritic pains, she stayed on her feet while engravers, printers, pressmen and the postal service completed the work her posing had begun.

July 1, Jumbina collapsed and could not rise. A kindly bullet ended her suffering—but not until every *NATION'S BUSINESS* subscriber had received a picture of a live and courageous pachyderm.

► **TECHNOLOGICAL REVOLUTION** is under way. Great growth of research promises new products, processes, methods, equipment.

A business machinery manufacturer reports one in every 12 persons on his payroll is engaged in research.

Another company—in chemicals—is spending three cents of every sales dollar on its laboratories.

Conference Board survey of 125 manufacturers shows nearly half have expanded research considerably in past five years.

These probings for new ideas, materials, applications, range into methods and marketing as well as into products.

They introduce a note of compulsion into your own forward thinking:

Your products, processes, methods must improve to match or surpass improvements coming in competing lines.

Don't confine your watchfulness to directly competing products. Laboratories have a habit of finding ways to switch materials, products, out of channels, into competition with other materials, products.

Example: Look at market opened—mostly at expense of competing materials—by glass in fiber form.

► **GROWING MARKETS**—that's cause of business expansion during past decade.

They've expanded both in size and income. Continued growth is indicated by Census Bureau estimate that population will increase 40,000,000 by 1975.

That's equivalent of five new states the size of Ohio—in population.

But without Ohio's farms, factories, schools, hospitals, services. These have to be created for the new population.

Add to this the new plant and equipment that will come along with technological advances.

And you may get a new upsurge of capital investment to take the place of the war surge now expected to taper off late this year or next.

► **WHERE'S MONEY** coming from to finance next upswing in plant expansion?

Here's one source: Overflow of savings. Mortgage market now has adequate funds to take care of home building needs at a million-a-year rate.

And savings still up—at a pace of

more than \$16,000,000,000 a year—a strong force toward easy credit.

► **OFF-SHORE MILITARY** purchases move in rapidly to take place of European economic aid.

That's all right with U. S. officials administering off-shore program. They contend economic security is basic support of military competency.

Another point: North Atlantic Treaty Organization nations are more concerned about economic development, not so worried (as we are) about military. So off-shore program seems to suit administrators on both sides of that question.

Up to last month U. S. had let production contracts totaling \$539,051,988.27 to firms in NATO countries.

These cover wide range of products. But greatest volume is in automobile, aircraft and communications equipment parts, and ammunition.

Reason: Biggest consumption demand in area of battle is for spare parts, ammunition.

Now there's talk of letting contracts for complete airplanes—latest U. S. models—for use of NATO forces, other than U. S.

Committee in Europe studies production possibilities. But final decision will be reached in this country—with health of U. S. aircraft industry uppermost in mind, officials report.

Off-shore contracts and dollar volume involved (rounded figures) so far are:

Belgium and Luxembourg, \$17,848,000; Denmark, \$4,832,000; France, \$273,448,000; Italy, \$127,489,000.

Netherlands, \$36,369,000; Norway, \$5,833,000; England, \$58,683,000; Germany, \$2,036,000; Greece, \$11,515,000.

Prices on some products are lower than in U. S., some higher. Depends on equipment, efficiency.

► **HOW GOOD** a salesman is your credit manager?

He's the man who closes—or loses—the sale in many "easy credit" setups.

Here's the pattern: Floor salesman sells the customer on merits of merchandise, easy credit plan.

Next step: Customer is turned over to credit manager, whose story is:

"Of course you can take this merchandise on a 'no downpayment' basis. But it

would be very much to your own advantage to make some initial investment."

Just how much down store is able to get depends on tact, persuasiveness of credit man.

If he can get none, credit manager is likely to find that customer is not a good payment plan risk.

Thus credit man's salesmanship has immediate effect on sales.

► NEW PRESIDENT wouldn't mean new government spending schedule for '53.

Budget now being prepared will guide federal dollar flow next year.

That's because it takes a year to compile huge governmental budget.

New President wouldn't have time to make much change in it—he'd have to go along with Truman's spending outline.

Budget message—as well as budget—probably will go to Congress from President Truman. For new President wouldn't take office until Jan. 20.

But he could set new tone, establish new over-all policies, recommend changes. That's about all. Be another year before a really new budget could take effect.

► YOU'LL HEAR CAMPAIGN thunder roll across nation for next several months—from congressional as well as presidential candidates.

Most of the thunder will be about issues—about policies that Congress finally will have to decide. What will next Congress do?

Let's take a look at what second session of Eighty-second Congress did:

President Truman demanded \$5,000,000,000 in new taxes, got none.

He asked increase in armed forces, but budget limitations precluded it.

He asked for Universal Military Training, didn't get it.

President Truman asked for continuation of soil conservation program, and got it—more liberally financed than he, or even farm organizations, recommended.

He asked tougher controls for 2 years, got weaker controls for 10 months.

Truman asked for Hawaiian, Alaskan statehood, got neither.

Asked for \$400,000,000 for federal highway aid, got \$550,000,000.

Congress approved President's request for G.I. rights for Korea veterans, but chopped in half his request for \$2,600,-

000,000 for public housing.

His request for general aid to education was turned down, although he got aid for schools in defense areas.

Administration-backed increase in old age and survivors' insurance was granted—to extent of \$5 more per month.

Flexible farm prices were set aside in favor of firmer 90 per cent of parity—more for farmers.

The President asked for broad flood damage insurance program, got none.

Disability benefits for veterans was increased with President's approval.

Although it was a main point in President's message, Congress passed no major legislation in health field.

St. Lawrence Seaway project was turned down over President's protest. So was Hell's Canyon project, Niagara power development plans. Congress did authorize Tuttle Creek project in Kansas—but with restrictions.

Congress overrode veto of new immigration law—but not Tidelands oil veto.

Japanese peace treaty, extension of NATO were approved.

Appropriations requests were cut, including foreign aid funds.

These are highlights, distinguishing features of second session. They also offer contrast between program and performance—even when Administration and Congress majority are of same party.

In that pattern you may find many of next year's battles in Congress.

On the calendar will be taxes, Tidelands oil, St. Lawrence Seaway, flood control, social security expansion proposals, reconsideration of foreign aid.

New farm legislation nearly always grows out of campaigns. Others upcoming: Wage, price, rent, allocations controls; statehood for Alaska, Hawaii, UMT.

And in addition there will be bills seeking to preclude loss of U. S. rights through executive treaty or agreement; to put all transport forms under jurisdiction of a single agency.

Others: War damage insurance, industry-wide bargaining, freight absorption, air-mail subsidy separation, reorganization powers of the President, improvement of appropriations procedures, reciprocal trade agreements—present law expires in '53.

And many others, of course, including the usual investigations.

Take a careful look at the candidates'

washington letter

stand on issues that affect you, your business.

► DO YOU NEED statistics to help make marketing, production plans?

Census Bureau will help you—at cost.

Special projects—tabulations to meet specific needs—is one of bureau's regular activities.

Example: If business census tabulations for districts don't coincide with your area of operations, Census Bureau will figure them out for your region.

Or it will tabulate figures for particular kinds of business. For instance, one company ordered tabulation of fuel consumed by manufacturers, by counties.

Bureau doesn't make field surveys on order—but will fish out statistics as you want them based on field work already done in regular surveys.

First step is to see if Bureau already has figures you want. Look in the catalog of U. S. Census Publications, obtainable through Superintendent of Documents, Washington 25, D. C., for \$1.50 a year (four issues plus supplements).

If figures you want aren't shown there, write to Bureau of Census, Washington 25, D. C. Tell them what you want. They'll let you know if it can be made available, and estimate a price.

► BE PREPARED FOR steel shortage next March or April.

Short, mild winter will mean less severe shortage. But if winter is long, cold, there will be serious shortage of steel in spring.

That's because 85 per cent of U. S. ore supply comes from Lake Superior region, moves down the Great Lakes.

Ice closes lake shipping four, sometimes five, months each year.

During shipping season ore boats carry 1½ times mills' ore requirements. The extra half goes into the winter stockpile.

So the ore shortage builds up at 150 per cent of day-to-day use when mines are idle.

There's little possibility that shortage can be made up. Some ore may be hauled by rail, but this is limited by availability of cars.

Canadian vessels, grain boats may be chartered, but these are busy in their own trades.

So key factor in catch-up attempt is

ore—and there's slight chance mills will get enough.

Note: Another strike effect will be strong campaign to gather scrap to take ore's place.

► NATURAL RUBBER GROWERS want U. S. Government-owned synthetic rubber plant sold to private industry.

Their principal reason: Belief that price of man-made rubber would go up if this nation's war-built \$1,000,000,000 rubber plant were owned and operated under private competition.

Thus an element of competition with Asiatic-grown rubber would be reduced.

And the flow of dollars for natural rubber increased.

But is that premise sound? American rubber fabricators—who use both synthetic and made rubber—keep careful check on the synthetic plants—they expect to buy them soon.

According to their figures: In the last year income of the Government-owned, industry-operated plants has met fully normal amortization costs—and provided a \$30,000,000 profit to the Government as well.

Which indicates the Government-set price is very close to what it would be under private ownership.

Note: Reconstruction Finance Corporation plans to sell all synthetic rubber plants to private industry within next 18 to 20 months.

► BRIEFS: Can government action increase occupational safety? General Motors study discloses that "the (accident) frequency rate and severity rate for federal employees is considerably higher than it is in many occupations with far greater hazards". . . . Post Office reports letter and card air-mail has jumped 26.8 per cent over 1950 level. Rail haul of letters and cards also is up. . . . Attachment that enables gun to shoot around corners is announced by Army Ordnance—to be used to discourage enemy hitchhikers on tanks. . . . One family in every ten in U. S. includes stock shareholders, Brookings Institution reports. . . . Federal Reserve Bank of Cleveland finds U. S. public has enough liquid savings to knock off work for two years' vacation without sacrifice in living standards. But it doesn't tell who would service the vacationers.



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BY MY WAY



Presidents and kangaroos

ONE advantage of being President of the United States is that people give him such things as albino kangaroos, blue birds of paradise, extra-large turkeys at Thanksgiving and Christmas time and many odds and ends that a man would never think of buying for himself. But a President cannot give much time to teaching tricks to an albino kangaroo or persuading a blue bird of paradise to talk English. The President, no matter to what party he belongs, is too busy. I must admit I do not care to be President, the way things are. If, however, the duties could be divided, so that one President would do the hard work of making up his mind, talking with members of Congress and signing papers, and the other President would look after the kangaroos and other presents, take trips on the presidential yacht and throw out the first baseball when the season opens, the situation might be different. On the whole, however, it seems to me that eminence of any kind—but especially the political kind—is more bother than it is worth. I'd like to have an albino kangaroo—but not that much.

Nature over the city

I KNOW a man who has an office high up, in the center of the big city. In the daytime his floor is busy. Evenings and nights it quiets down. Sometimes he stays late, turning over some work that is hard to do when many feet are going up and down outside and the telephone, if not actually ringing, is forever about to ring. But evenings are not always the best time for work. The man looks out across the lights of the city to the lighted hills on the other side of the river. It is peaceful where he is, as it is at his home in a rural suburb. Peace comes down from the sky and quiets the noises of the street. Sometimes the moon, sometimes even the stars, outshine the glitter

of the town. And this is Nature, too, the man thinks, just as the still country nights are Nature.

A dog's life

A PRISONER who escaped from jail in Beaver, Pa., was picked up without much delay in a Pittsburgh hotel. On the other hand, it took two weeks to pick up the valuable bloodhound assigned to track the fugitive. The bloodhound's owner was presented with



what might well be called a problem. If he had had the bloodhound at hand he could have put it on its own trail, but he didn't have it. Moreover, he couldn't put the escaped prisoner on the bloodhound's trail, partly because the law does not permit this, partly because the prisoner had been caught. The sagacious animal was finally discovered in a cave brooding. Perhaps the truth had finally dawned upon it that, except for bloodhounds who work in Uncle Tom shows and get admired and praised wherever they go, bloodhounds have little fun and are seldom appreciated. Who wants a pet bloodhound? Maybe a deputy sheriff does, but who wants a deputy sheriff? If I were a bloodhound I, too, would go off and sulk in a cave.

Philadelphia "slowness"

MY WIFE and I went down to Philadelphia not long ago, partly to have another look at Independence Hall and partly to get a little peace and quiet. The latter effort was not wholly successful, because Philadelphia is not as tranquil as the jokesmiths used to make it out to be. But we noticed one phenomenon that the guide books didn't mention: nobody seemed to be trying to beat a red light. We

saw with our own eyes, and can testify to it in any court, drivers who stopped back of the white line as soon as the light began to turn red. The consequence was that nobody got killed in an automobile accident in downtown Philadelphia during the two days we were there. Of course people do get killed in such accidents in Philadelphia, but fewer of them, I imagine, than in some other cities. I wonder if this symptom is a lingering trace of the old-fashioned Philadelphia slowness. If so I would like to observe that slowness can be a good thing. I'd rather be slow than dead, any time.

Lamp-shade world

WHEN I am writing at home at night I have only to lift my eyes to see a map of the world on the lamp shade on my desk. It is an imaginative map, with spouting whales, polar bears and full-rigged sailing ships, none of which I would be likely to see if I went where they are shown. It is a map that makes one wish to go somewhere, even if one has just got back. It is a good-natured map, with no lines to indicate serious international boundaries or differences of opinion. I could cross Russia on it, or China, with no



trouble at all—and this is not in fact and in real life true. Well, some day I am going down and have a look at the Tropic of Capricorn, which I don't believe requires any politics. Meanwhile I shall stay put for a while and let my dreams roam the lamp-shade world, of pleasant places and happy peoples.

Watch that ivy

WE NOW have a chemical that will kill poison ivy. Poison ivy never bothered me much but I have enough sympathy for those sensitive to it to wish to see it vanish from our countryside. But I also wish that somebody would invent a nonirritating poison ivy. (Perhaps somebody has; perhaps that is precisely what the ivy that covers ivy-covered cottages is.) There isn't anything prettier in the way of green leaves than a poison ivy vine on an old wall in spring; and nothing much prettier than a



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poison ivy vine in the fall, when it turns half the colors of the rainbow and fairly shouts its autumnal message of good cheer. (That's the time to watch out for it, too; a cheerful poison ivy vine has no conscience at all.)

Just puttering around

I HAVE been puttering around the yard today—or, as some prefer to spell it, pottering. My dictionary says this means "to work loiteringly or inefficiently." That's me all over, on such a day as this. I put a couple of stones in a weak spot in the wall; I discovered a dead squirrel and buried it. I transplanted a few bulbs; I clipped some spears of grass that had proved too much for the lawn mower, but mainly I puttered. If the going wage for efficient work was a dollar an hour I would have been worth four or five cents an hour. But it is a good thing to be worth that much, and no more, once in a while. It is restful.

Tomorrow I shall be efficient again.

Chowder—or something

I SUPPOSE a lot of amateur gardeners hastily put in potatoes this year during the recent short supply in that field. I also note that onions have been doing well for more than a decade and I do hope that neither potatoes nor onions will ever become scarce enough in this country to make the production of a chowder a problem. I have a favorite chowder, made with milk, potatoes, onions, dried codfish (yes, dried codfish), a bit of bacon and various condiments.



But I could never raise the onions for the chowder; whenever I tried to do so, although this was many years ago, when five cents was still a usable coin, I succumbed to the temptation to eat the stalks before the onions matured. But, as I was saying—or what was I saying?

Fun in summer—1952

IT SEEMS to me that in former times when a person wished to have fun in summer he (or she) just went out and had fun in summer. Nowadays, as I note by reading the catalog of one of my favor-

ite stores, it takes equipment. It takes the proper sort of clothes; it takes a portable bar; it requires swimming fins, a swim mask and a snorkel; one must have water skis, a pedometer, an outdoor grill and various kinds of chairs and tables; there are more tricks to backpacking than I ever heard of when I engaged in it. And so it goes. But I am not complaining. Life is not as simple as it used to be. What's



more, it never was as simple as it used to be. I reach for the order blank and checkbook. I think I will get me a folding aluminum sun tan cot; then I shall lie on the cot and while getting sun tanned will meditate on whatever else it is I need.

A song to remember

THE manuscript of a poem by the late Robert Burns will have been sold at auction in London by the time these lines are in print. Some words are missing from the last stanza, but this is not considered too damaging; few persons get that far when they sing the song—for a song it is. The whole manuscript could disappear, but the song would survive; indeed, all written record of it could disappear and it would still survive, still be sung at partings and embarkations, and especially as the clock approaches midnight on New Year's Eve.

For the song is "Auld Lang Syne," which, as poor Burns could never know, lives forever in the hearts of all who speak or sing the English tongue.

I wonder what the manuscript will fetch. But it doesn't really matter.

Cheese and mice

A SCIENTIST at Rutgers University, so says the New York *World-Telegram*, has found that mice do not really care for cheese; they like peanut butter, raisins, bacon and gum drops better. I do not care, one way or the other, because in our house we do not deceive mice with traps; we don't regard this as honorable. If we suspect the presence of a mouse we mention the matter to Petunia, who yields to none in her zeal for the hunt, and Petunia attends to the mouse

in the old-fashioned way. But what really interested me in Dr. James R. Westman's quoted remarks was not the discovery that he made but the fact that he discovered it. If mice don't like cheese why wasn't this attitude disclosed long ago? Or if mice once liked cheese but don't now like it what is the cause of this? Next thing we know somebody will come up with the announcement that boys don't like green apples. I feel upset and anxious.

Too many cats

A 17-YEAR-OLD cat residing in Trenton, Texas, is said to have been the mother of 420 kittens. Not all at once, of course; she is thought to have achieved this record by having 140 litters of about three kittens each. By this time it may be 141 litters and 423 kittens. If half of these kittens were females and if each female equaled her mother's record the result would be, as I figure it, more than 88,000 kittens by 1969. I shall



not carry this computation further but it is clear that by 1986 there would be more kittens in Trenton, Texas, than one small town really needs. And if all female cats did likewise this country would after a while be a half mile deep in cats and not good for anything else. Our own childless Petunia says the moral is that we should go in for quality rather than quantity. Not mentioning any names, she adds, blushing slightly.

Sea music

I SHALL always remember the steamship *Colombie* by the sweetly mournful sounds she made when she headed up into the moving sea and the trade wind sang in the rigging over the cargo hatch. The song always made me think of Masefield's "Trade Winds," which has been set to music; it always made me sad; it always made me happy. There were voices in it that I longed to hear again, memories in it to be relived, hopes in it to be realized or not, as is the way with human hopes. But one could sleep to it; it was, indeed, one of those dear, drowsy sounds, like rain on the roof and the far-off tinkling of

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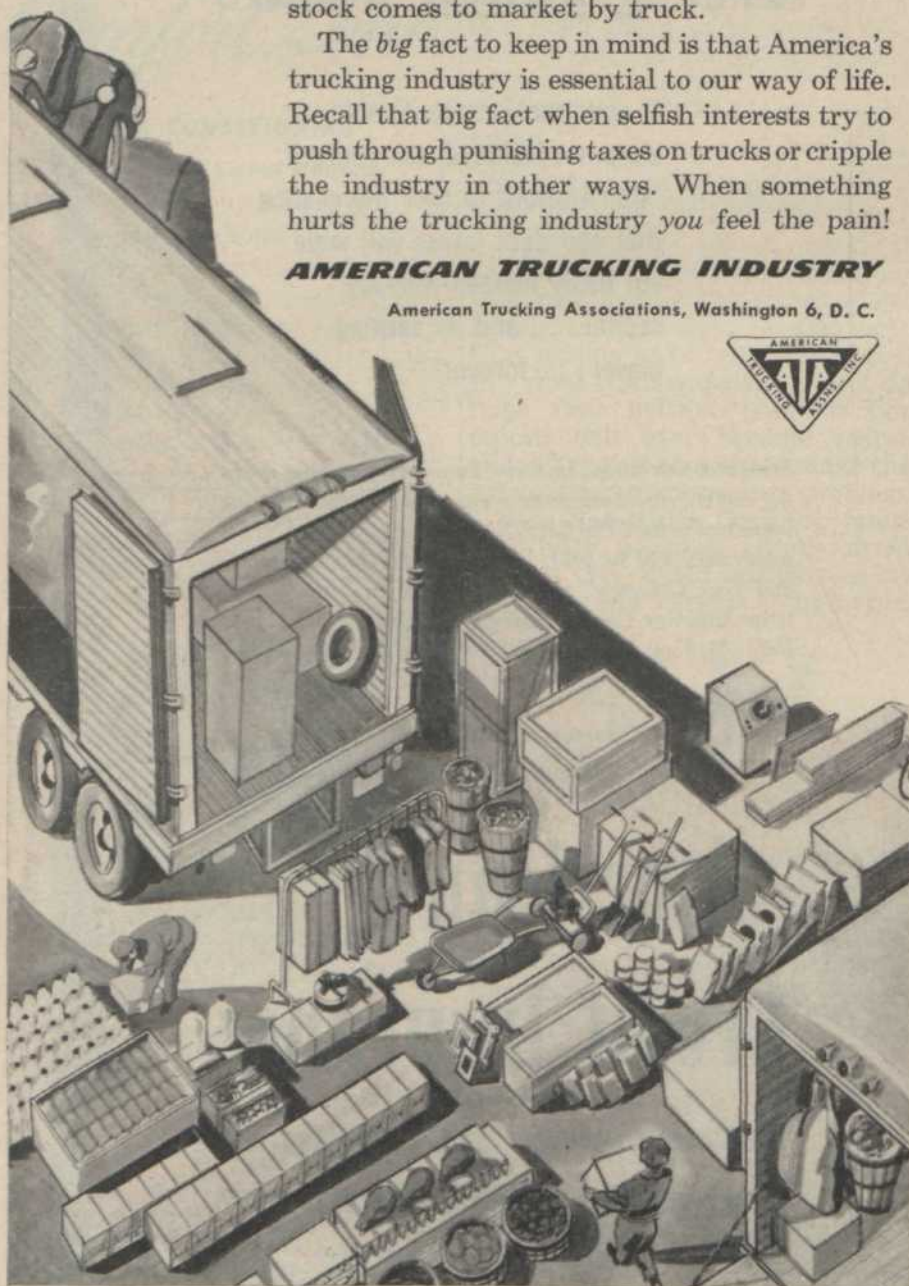
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bells, that take one out of the real world and into the world of dreams. I wished I could have found words for it but I never could.

Bird life at St. Croix

A BIRD used to come in our open window mornings at St. Croix. He may have been a warbler, a vireo, a wild canary—he couldn't or wouldn't say. Usually he arrived, an hour or so before we wished to get up, in what seemed to be a mood of innocent curiosity. After a few preliminary flittings he would settle on the top of the mirror and lean down and catch sight of himself. Then he would fly into a passion, evidently under the impression that his image was another bird—and a low-lived, sin-



fully ugly bird at that. In this state of mind he would knock over small objects, such as talcum tins, on the top of the bureau, and finally dash indignantly out the window. He never learned the unpleasant truth about himself. Or maybe we had a different bird every morning. In either case the incident confirmed my impression that birds are no smarter than human beings—and perhaps not even as smart.

Optimist at work

MY OLD friend Horace Worful of East Dinglebury, Vt., doesn't hold with people who fall into a gloomy state of mind in August because the days are getting shorter and they are afraid winter is coming. He says, agreeing more or less with the poet Shelley, that in no time at all the days will be getting longer again and before you know it, scarcely, it will be August, 1953.

As for August—

AUGUST is the month we don't always like when it is here, but which we may wish it was next February. August is the month when other people are having vacations. August is a month that has its faults, but as for me I would rather it were August than no month at all. As my favorite aunt used to say, you'd better not wish time away or it will—and it does, if I make myself clear.

OF NATION'S BUSINESS Trends



BY FELIX MORLEY

EVERYBODY appreciates the obvious difference between the campaigns for the party nominations, now over for this Presidential year, and the runoff, now getting under way. It is the same difference that distinguishes the preliminaries and the finals in any elimination contest.

There is, however, a more subtle distinction between the nominating and election campaigns. This roots in the fact that the former is a party and the latter a national affair.

As we have just witnessed, the role of the nominating convention, in American politics, is twofold. It not only selects the party leader but also defines the platform on which he will ask for popular support. In both these functions the will of the politicians rather than the voice of the people controls. But the final decision, reserved to the aggregate of the voters in November, compels the party leadership to respect the trend of discernible public opinion in making the nominations. No politician wants to back a loser.

• • •

Because the party does not declare its principles until the nominating convention, the pre-convention campaigns must of necessity focus on personalities. Before the platforms have been adopted the voter cannot be sure which political philosophy has more appeal for him. Moreover, it is reasonable to suppose that all contenders for

a party nomination have fundamentally the same viewpoint. So the difference in personality remains as the issue on which the fight for the nomination is waged.

Now that the nominations are settled, however, it should logically be the other way around. One may assume that each party, all factors considered, has chosen its most effective campaigner. So the postconvention campaign ought to focus on the difference in political principles that has heretofore been soft-pedaled.

That is the theory of our election system. It is not always followed because the habit of human beings is to respond with more enthusiasm to the competition of individuals than to the clash of underlying principles.

This election year, however, is witnessing unusual public consideration of political principles. For that we may be grateful to the Kremlin. The Communist threat to American institutions is forcing us all to consider the fundamental concepts on which our way of life is based. What we call "Americanism" is much more than flag waving and empty rhetoric. To defend America, we must understand its values.

Because so many are seeking to do just that, there was, during the preconvention period this year, more argument, sharper rivalry, and also greater acerbity than is usual. And the fight for the nominations centered, in both parties, on principles rather than on personalities.

Naturally this was more pronounced in the G.O.P., anxious for a leadership likely to bring it back to power after so long a period of exile. But

there was also plenty of clash between the southern and northern factions of the Democratic party. In both cases the

drafting of party platforms was especially difficult this year, because each of them was groping, amid divergent viewpoints, to find a clear and effective political philosophy.

The significance of these preconvention wrangles, in both parties, becomes more clear now that the decisions on candidates have finally been made. In the heat of battle the important matter is to win. Only when the fight is finished can one say, as of Gettysburg, that here was one of the really decisive struggles between rival ideologies.

But there were indications, even before the Chicago conventions, that some of the aspirants to Presidential office were well aware of the importance of the history then in the making. And this was especially true of the Republican contest, in which the philosophical conflict was especially bitter.

• • •

For instance, General Eisenhower, in an interview shortly before Chicago, summed up his political philosophy in a clear and concise statement. "I believe," he said, "that the will of the American people should not be thwarted."

It is impossible to estimate, in retrospect, what influence this confession of political faith may have had on the Republican outcome. But it greatly helped to define the fundamental issue, much more clear than any "isolationist" vs. "internationalist" division, between Senator Taft and the general. Taft met the Eisenhower statement by emphasizing his faith in constitutional government. And under our Constitution, as a moment's reflection informs us, the will of the American people may at any given moment be very easily thwarted.

It may be thwarted by a Supreme Court decision, by a Presidential veto, by Presidential action taken under the doctrine of "implied power," by the fact that senators represent states and not numerically equal constituencies, and perhaps most flatly by the Bill of Rights. This would still protect the liberty of an American Communist, as a striking example, even though 99 per cent of our population might want to see blanket incarceration of all our native Reds.

• • •

In short, the whole system of checks and balances, which is the unique feature of the American federal Government, serves to thwart, and was definitely intended to thwart, any extension of authority by Washington in any area of control reserved by the Constitution "to the states and to the people."

This ought to be more in our minds when we talk, rather loosely, about "democracy." In political terms, a democracy is simply a form of government in which the will of the majority, so far as it can be ascertained, is all-powerful. In a democracy no minority has any rights that the majority cannot cancel. But with us, individual persons, associations and states have constitutional rights which no legislature and no executive is empowered to override. This means that the United States is not politically a democracy. It is a federal republic.

Of late years, however, we have praised "democracy" so fulsomely that many people have come to believe, with General Eisenhower, "that the will of the American people should not be thwarted." Morally, that may be true, but not so legally. The point was well illustrated in the struggle over the seating of contested delegates at the G.O.P. convention. The practice of choosing these delegates by a caucus of party insiders cannot be called democratic. But it is the traditional and wholly legal system in all but the 16 states that have adopted open preferential primaries. Undoubtedly the rules of the political game have long needed cleansing. But it would have been better not to put through reforms in the middle of a heated contest.

• • •

To emphasize this, however, is not to minimize the importance of General Eisenhower's preconvention statement of political faith. For the checks and balances are only obstacles, not barriers, to the triumph of the majority will. What the American people want from their national government insistently, they can, under our system, eventually obtain. Although our political democracy is strongly qualified it is not the less real. The will of the majority, though not immediately and not always wisely, does eventually triumph, provided only that it is sustained.

The extent to which the popular will should be impeded, in order to safeguard local self-government and individual freedom, is now as it has always been, the greatest American political issue. That is as it should be, for none can say with certainty at what point the individual interest is served, and at what point damaged, by action of the federal Government. The answer differs from person to person, and from day to day.

The difficult art of our government is to follow the majority will without infringement of minority rights. To this end our two great parties last month worked out their separate and conflicting formulae. Never before has there been more soul-searching and greater effort in reaching these rival positions.

On the electorate now falls the final responsibility. The political parties, so far as it is within their province, have honorably set the stage.



BY EDWARD T. FOLLIARD

THE POLITICAL reporters who cover Washington soon will be packing up again, getting ready for the big road show of 1952.

This will take them on the "swing around the circle" with the candidates, the most picturesque aspect of the whole exciting drama of electing a President of the United States. There is nothing quite like it anywhere in the world, because no other true republic has so vast a stage.

The quadrennial show goes something like this:

A locomotive whistle sounds in the distance. Presently, the "Victory Special" comes hammering down the tracks and pulls up at the depot. A brass band cuts loose with some old favorite. Flags and placards appear above the heads of the crowd. Then comes a roar of applause as the candidate steps out on the rear platform, smiling and confident.

"It's good to be in Toonerville," says the candidate, and goes on to surprise and delight the crowd with his knowledge of Toonerville—its history, its products or manufactures, and its voting habits. Of course, the candidate has been "briefed" on all of this.

The crowd surges forward to get a better look. Proud fathers hold their little ones aloft so that they may see the great man and be reminded in later years of the historic event. Photographers swarm around the train, exploding flash bulbs and yelling "Just one more." Reporters write furiously, while Western Union men wait to grab their copy and put it on the wire.

The candidate winds up his talk. There are handshakes for the mayor, the politicians, the chief of police and the town bigwigs, and then the train continues on its way, usually with an added cargo of gifts for the candidate.

It is all very smooth and simple and casual, and few will know about the tremendous amount of planning behind the tour.

The master-minding takes place long before the candidate goes on the road. Maps are brought out, and the party strategists in national headquarters start working out an itinerary. Usually,

WASHINGTON MOOD

they decide on at least one big transcontinental trip—the "swing around the circle," as Andrew Johnson called it—and a series of shorter trips as the campaign goes down the stretch.

At the outset the strategists face three categories of states: "sure," "hopeless," and "doubtful." Republican candidates hardly ever bother to go into Maine and Vermont; these are generally regarded as sure for the G.O.P. Democratic candidates rarely go into these two states either, because, from their standpoint, they are hopeless. The states to be considered then are the "doubtful" ones. These states have a record of switching from one party to another, or, because of some particular set of circumstances, may show signs of breaking away from old voting habits.

Once the candidate's route has been decided the railroad men are called in and the business of making up the train and laying out the schedule gets under way.

• • •

Ordinarily, a Presidential campaign train includes the candidate's private car and about 11 other cars.

Incidentally, not many "private" railroad cars are left in the United States. They used to be common back in the days of Jay Gould and "Diamond Jim" Brady, and nearly every man of great wealth had one. Somewhere along the line, as we moved into the motor age and then the air age, the wealthy just stopped putting out the \$250,000 that a private car would cost.

And so, in all likelihood, the car that the candidate rides will be called a "business car." The chances are that it will be one used at other times by the president or the general manager of a railroad.

It will have the familiar rear platform and brass rail, naturally. Inside will be a spacious parlor or lounge, where the candidate can talk to politicians who come aboard to discuss the "situation"; three or four bedrooms, a shower, a dining room accommodating ten or 12 persons, and a galley. There will be a crew of three—a steward, cook and porter.

The next car will be occupied by the train master, perhaps a railroad superintendent of division, railroad police, brakemen, and so on. Also, it will house key men of the can-

OF NATION'S BUSINESS
Trends

didate's staff, including his press officer and transportation officer.

After it will come a car that is likely to have, not only sleeping accommodations, but work rooms. It will carry the candidate's ghost writers, stenographers, and mimeograph operators.

Then comes a lounge car, where the staff can relax and where sometimes the candidate meets with larger delegations of politicians.

Next to that is the press car. This is an ordinary coach stripped of its chairs to make room for writing tables. These tables extend the length of the car, on either side, and support the typewriters of some 40 or 50 reporters. A loud speaker, with wires running back to the rear platform, brings in the candidate's words.

Beyond the press car, moving forward toward the locomotive, are the sleeping cars occupied by reporters and photographers, the baggage cars, and the crew car.

That leaves only the dining cars, which are usually in the middle of the train. These are changed as the campaign special moves from one railroad line to another.

Fortunately for the passengers there is keen competition among the different lines to serve up good meals.

A gourmet would have a rough idea of where he was on such a train even if blind-folded, as the various regions come up with their specialties—whitefish in the lake country, trout in the Rockies, and fruit on the West Coast.

• • •

Advance men are always out ahead of a campaign train. Their job is difficult and sometimes delicate. They must arrange for a reception committee, and this often involves bringing about a truce in local political feuds. If the candidate is to leave the train, arrangements must be made for a hall and also for a parade. Police protection, radio and television time, and countless other details must be worked out.

It is the advance men, of course, who get word to the candidate as to just what he should do in a particular town or city—whom to be nice to, what issues to stress, and what to say that will appeal to the pride of the townsfolk.

And what pride there is in the various sections of the United States! By the time the campaign special gets back to home base, the candidate usually has been overwhelmed with mementos of the places he has been. There will be crates and crates of food, including game in season; sombreros, boots and spurs; Indian bonnets, peace pipes and blankets, fishing rods, and many, many other things.

There are, of course, certain hazards in a campaign tour. Frequently, the candidate gets be-

wildered, doesn't know what town he is in, and hauls off with a greeting to Vincennes, let us say, when he is actually in Gary. This is pardonable, certainly, bearing in mind the kaleidoscopic nature of the trip, but the candidate's managers are not very happy when it happens.

And then there are the "incidents," which seemingly are inevitable.

• • •

In June, 1948, at Carey, Idaho, President Truman dedicated a small airport. He thought he was dedicating it to a young man, a fallen soldier of World War II. He had good reason to think so. As he came up to the scene of the ceremony, he was saluted by an honor guard made up of war veterans. They were in their old uniforms and on their breasts were campaign ribbons and decorations. Mr. Truman made some remarks about how the young man had given his life for his country.

It turned out, though, that the airport was being named for a 16-year-old girl, who had been killed while flying with a boy friend.

The President was horribly embarrassed. He expressed his sorrow to the bereaved parents of the girl, and later on gave his staff a furious bawling-out for failing to brief him properly.

The next incident came on Gov. Tom Dewey's train. It was on a night in October and the campaign special had just pulled into Beaucoup, Ill., Governor Dewey became alarmed when the train backed up against a crowd of 1,000, and he exploded with his memorable remark about a "lunatic engineer." It didn't help him any in November.

The candidate's health is always a matter of concern. I was on Wendell Willkie's train in 1940 when the Hoosier lost his voice while campaigning in the Midwest. Willkie, an amateur in politics, didn't know how to pace himself. He was like a prize-fighter who rushes out of his corner, determined to win in the first round. As a result his voice gave out before he had been on the road three days.

Are these arduous trips really worth while? Do they really win elections?

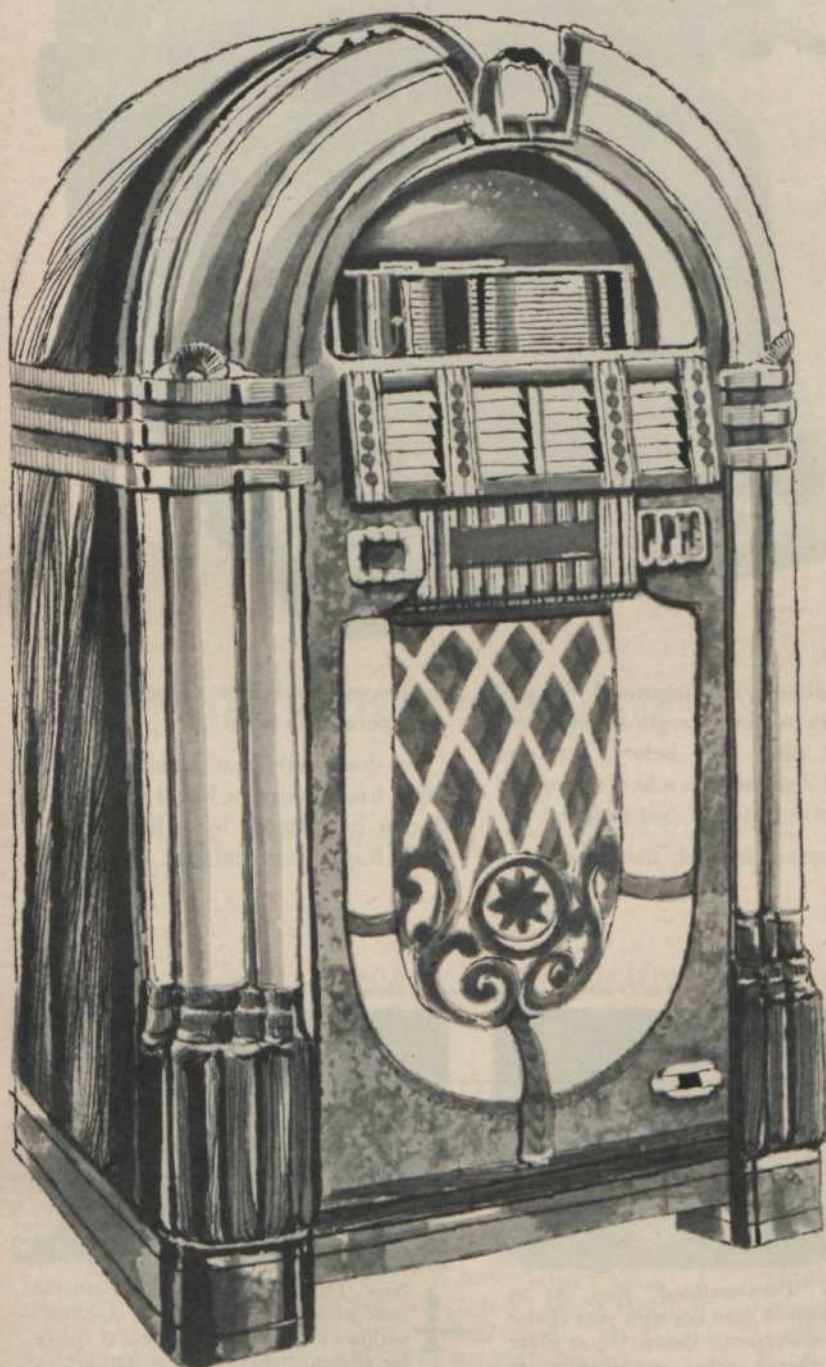
Well, some candidates have managed to win by staying at home and conducting "front-porch campaigns." But fresher in our minds is what Harry S. Truman did in 1948.

It will be recalled that in the early part of the '48 campaign, Mr. Truman was not believed to have a chance of carrying such Corn Belt states as Ohio and Illinois. But the President hit both states hard, visiting some places three and four times.

Mr. Truman carried Illinois against Dewey by the narrow margin of 37,612 votes and Ohio by the even narrower margin of 7,107 votes. There could be no doubt that his vigorous barnstorming gave him the margin in both.

DROP ANOTHER NICKEL IN, AND

HEAR THOSE OLD TAX BLUES



"Money, money, money" is the melody. "Money, money, money" . . . it's monotony.

Night and day, it has been going on far too long — "Taxes, taxes, higher taxes!" In the past seven years, total taxes collected were \$26 billion *more* than in all the 156 years before, right on back to George Washington.

Think of it!

The melody has long since died. Now it's a dirge. Easy to see why — when you realize that *today* taxes are taking one-third of all our national income, dangerously past the safety point.

Can't we hear a new tune? Business men, large and small, have been working at it. Through the Chamber of Commerce of the United States, they've been singing "Save, cut out waste, economize" to their Senators and Representatives. With every instrument at their command — the speaker's platform, newspapers, radio and TV — they've been plugging the sweet music of an equitable and sustainable tax system. For a quick picture of the work and aims of the National Chamber on the tax problem and on other national problems, send for a copy of our Annual Report.

CHAMBER OF COMMERCE OF THE UNITED STATES
Washington 6, D. C.



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Sensational new Carriage Control!
Extra "Personalized" Key found
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They are helpful, timesaving con-
veniences — each one designed with
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So, don't wait! You can have a free office trial of the new Royal Standard Typewriter simply by calling your local Royal representative.

1 "Magic" Tabulator, a new, exclusive feature which allows the secretary to operate tab with either finger or palm without moving her hands from the guide-key positions, aids speed.

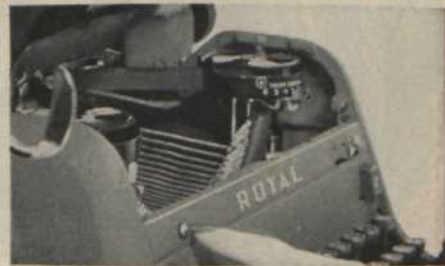
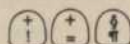
"Magic" and "Touch Control" are registered trade-marks of Royal Typewriter Company, Inc.



2 Carriage Control, a new, exclusive feature which lets the secretary suit the carriage tension to her needs. Just a flip of the knob does it! No need to call in a repair man! What a convenience!



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4 New Timesaver Top. Look at the convenience here! "Touch Control" within easy reach. Easy-to-get-at spools for ribbon-changing. Press button ... it's all instantly accessible.

See the Wonderful New Royal Standard Now!



*This home-grown performance
under the big top was built on fun
and nerve, and people wanting
to do something together*

THREE-RING TOWN IN TEXAS

By CAMERON SHIPP

THE automobile agency man, Frank E. Schmitz, and the newspaper publisher, Clarence H. Leonard, trudged down Gainesville's main thoroughfare one hot Texas morning in the summer of 1950, turned into the National Bank in the 300 block, and put a matter squarely up to Arthur Dillard, president of that bank.

"We got to have an elephant, Art," they said.

"We been sitting across the street at Swindle's drinking cokes and sighing," they said. "And all there is to it, we purely require an elephant."

Dillard may or may not be the most imperturbable banker south of the Chase National, but he did not blink an eye. He appraised the statement for the sound financial proposition and community necessity that it was and handed the boys \$3,000, hurriedly refusing to accept a circus tent, or even the prospective elephant, as security.

"What in the world would a bank do with 'em if

we got stuck?" he wanted to know with a shudder.

This kind of financing may seem bizarre, even for Texas, but in Gainesville, population 11,246, according to Secretary Jerry Hanry's wildest brag at the Chamber of Commerce, the purchase of a pachyderm inspired no one to suggest two leading citizens as candidates for the daffy bin. Gainesville is Circustown, U.S.A. Gainesville clowns in, trapezes in, hangs by its teeth in, bareback rides in, whoops and hollers in and rejoices in its own community circus, a big, loud, happy, spangled oom-pah three-ring enterprise the like of which exists nowhere else in the world. Fifteen hundred persons, one eighth of the population, take part.

Housewives fly through the air with the greatest of ease in Gainesville. High school girls tumble on broad-beamed horses. Engineers, dentists, cotton brokers cavort in grease paint. Grammar and high school boys and girls work out on rigs in back yards

When the Rev. Johnstone Beech left his circus job, it was much sought after



all over town trying to make a place for themselves in the center ring. When the Rev. Johnstone Beech of the Episcopal church relinquished his spot as a clown, 22 candidates applied for it. The Rev. J. P. Pound, a newcomer, was one of them.

It's all amateur and nonprofit but after 25 years and with some families already circus folks for three generations, the Gainesville Community Circus is amateur in name only: the smart performance under their own big top is sleek and professional.

Billy Rose said: "The most delightful thing I've ever seen." It is that and more, for aside from the fact that the performers are so good that they tour Texas and Oklahoma every year and have been applauded by more than 500,000 astonished spectators, the almost unbelievable thing is that any community like this could put on any circus at all.

This year, the circus offered 27 acts, or "displays," with a spectacle whose costumes were a gift from their admirer, John Ringling North, head of Ringling Bros.; a trained lion act, in which David Hoover, a 22-year-old Air Force sergeant, did wonders with six-months old cubs; an upside-down unicycle act, equestrians, tumblers, acrobats, tightrope walkers, bareback riders, dog acts, jugglers, 28 spangled ballet girls in costumes as fresh and crisp as a Broadway musical provides, and 21 clowns.

It even has tradition, including a heartbreak and happy-ending story-within-a-story about a clown

and a pretty lady on a trapeze. We'll come to that.

You'll find Gainesville 70 miles from Fort Worth and Dallas, seven miles south of the Red River, bordering Oklahoma in north-central Texas. U.S. Highways 77 and 82 run through the town. It's relatively old, founded in 1848. The famed Chisholm Trail ran nearby.

Like many other Texas communities, Gainesville has lived through three phases, cattle boom, agricultural boom, and oil boom. But today it is a staid town, a dry town, and a powerfully strong church-going town. Wealth is moderate. There are 2,000 oil wells in the county but few "Christmas Trees," or million-making gushers. The biggest payroll in Gainesville derives from the Santa Fe Railroad with 150 employees. Clarence Leonard's newspaper, the *Register*, has a circulation of 5,000.

Plainly, a circus in Gainesville is about as logical as Alice's tea party with the Mad Hatter. Its existence for 22 years is an example of nerve and community cooperation and a gay picture of free enterprise, but it all started as a happy accident. Gainesville had a little theater group which gave a few plays every year in the movie house. When sound pictures came in, the new equipment crowded them off stage and they gave up. But Morton Smith, the now-graying editor of the *Register*, had a hobby. He collected miniature circus models, sometimes displayed them in store windows.



PHOTOS BY FRED SHELTON

Almost every able-bodied person in Gainesville has something to do with the community circus

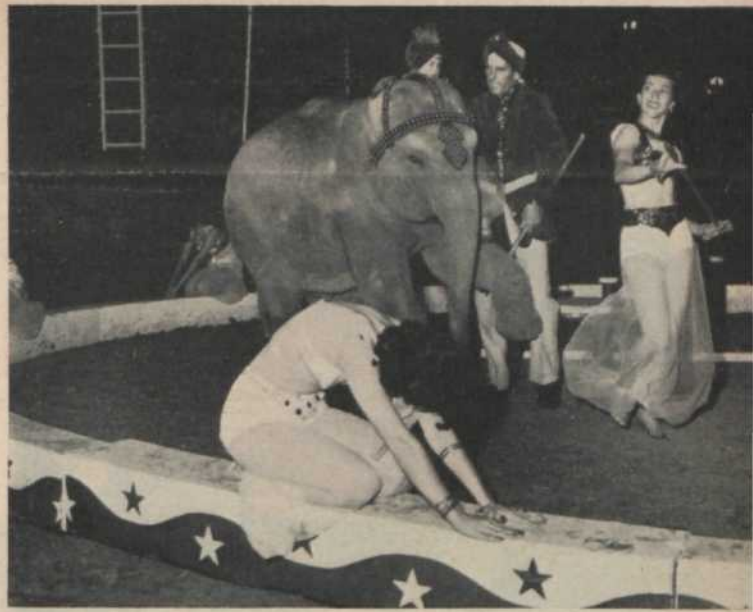
Morton said when the little theater perished: "Let's burlesque a circus. Let's kid hell out of circuses. I saw it done once. Very funny."

It turned out suddenly that Miss Christine Blake, high school mathematics teacher, had yearned all her life to swing by her legs from a trapeze. Ben Franklin Mitchell, judge of the county court, confessed shyly that the law was noble, but what he really pined to be was a clown. Frank Morris, president of the First State Bank, said shucks, the grandest, most celebrated post a man could occupy in this existence would be leader of the band.

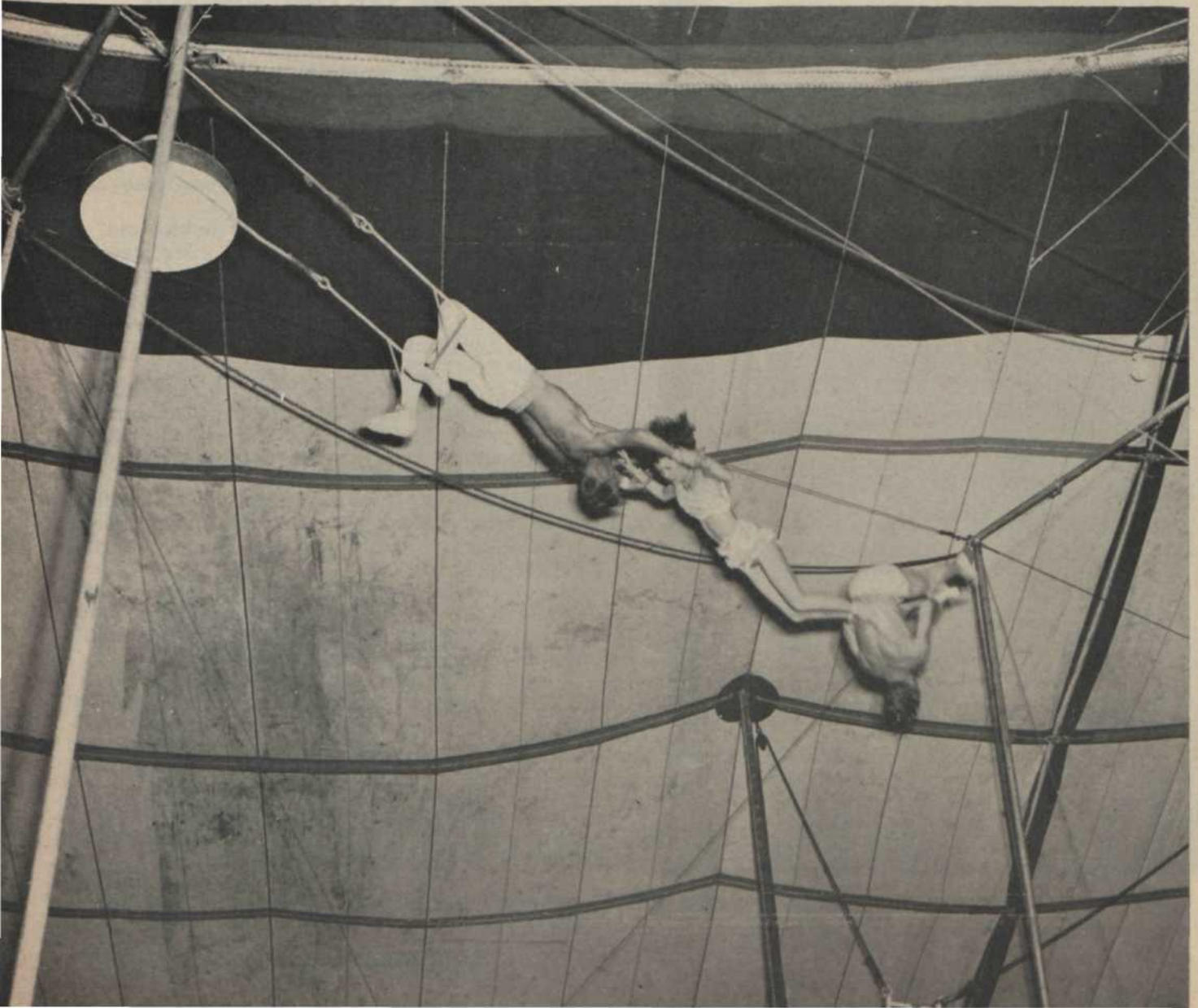
Mrs. Alex Murrell, wife of the chief engineer of the Texas Power Company, said people might be surprised what she could do on a high wire. She had always thought, too, that it would be a supreme achievement to ride a white horse through a flaming hoop.

Before you could mutter "Texas-is-the-greatest-state-in-the-union" under your breath, every kid in town announced that he was the world's slickest acrobat. And every girl who'd ever been whistled at let it be known that she'd look just fine in tights, hanging from a wire by her teeth.

It was as simple as that, and every man who remembers the awesome tingle of creeping out of bed at dawn to see the circus unload knows the basic principle: everybody wants to run away with the circus. The upshot in (Continued on page 50)



Today the town has \$75,000 worth of equipment, including an elephant, as well as a \$10,000 big top





The effects of controlled climatic conditions on these peas are recorded to compare growth of varieties

ATOMIC

Scientists at Cal Tech
are pinning down the age-old
mysteries of what makes plants
grow large, small, or not at all

By **VICTOR BOESEN**

THE VISITOR, having heralded his arrival outside by means of a telephone at the door, was admitted to a small vestibule, and from there led into an adjacent washroom. His guide pointed to the lavatory. "Wash your face and hands," he directed.

Slightly shaken, the visitor did as he was told.

"Now strip down and put these on," instructed the other, holding out a white pajama outfit. "And here's a cap for you." He handed over a white cloth item designed to fit snugly over the head, with a string in the back to tie it in place. "But comb your hair first."

These instructions complied with, the guest's shoes were sprayed with DDT, and then, looking like a doctor ready for surgery, he was guided into the inner sanctum, emerging there through a door marked "Gentlemen."

As he progressed down the corridor, feeling a little foolish in his doctor's getup, he somehow produced a pack of cigarettes. "Smoke?" he said, proffering the pack to his host.

In a moment he was back in the washroom, propelled there by urgent hands. The cigarettes were confiscated like smuggled goods by a customs agent, and he was sternly told to scrub up again.

It wasn't that the host was blue-nosed about smoking. These precincts were those of the \$500,000 Earhart Plant Research Laboratory of the California Institute of Technology at Pasadena. In this low, vault-like building, the first of its kind in the world, plant scientists are trying to pin down the age-old mystery of the relationship between a plant and its environment—which factors in what combinations make it do what, and why.

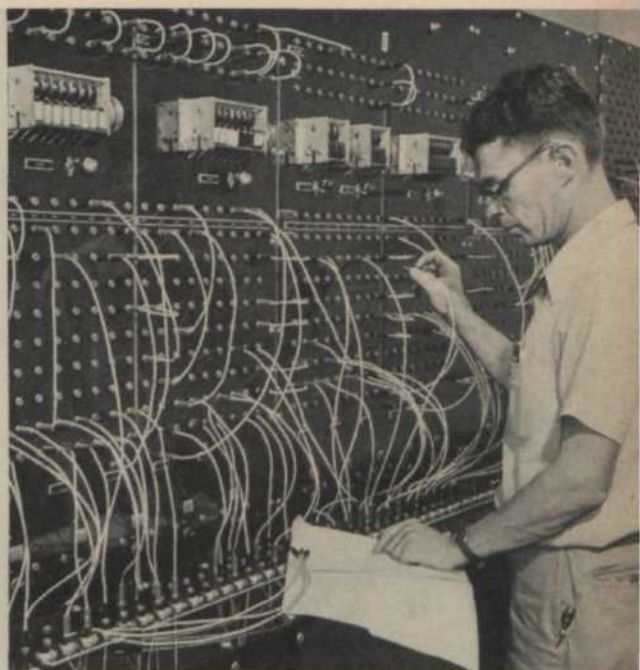
A plant is like a tiny chemical factory. Using the sun's energy to turn the wheels, it draws carbon dioxide (the thing we breathe out) from the air

AGE GREENHOUSE

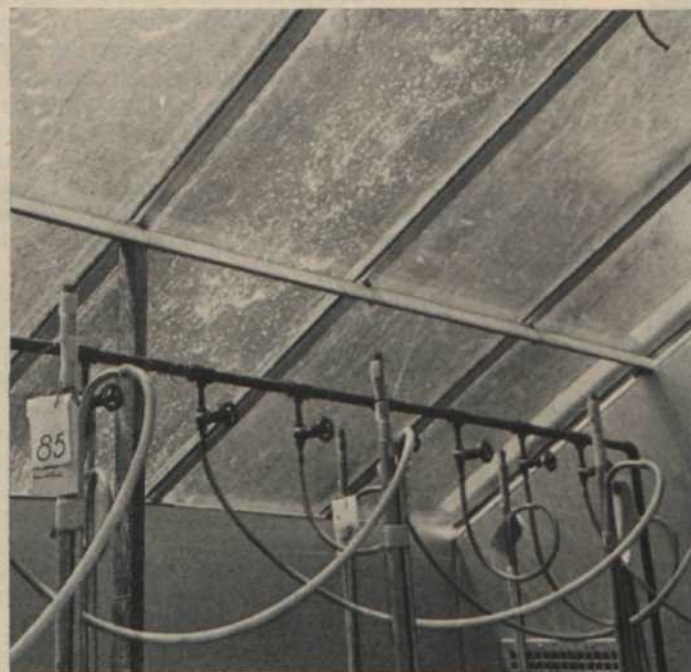
PHOTOS BY NOLAN PATTERSON FROM BLACK STAR



Occasional visitors allowed inside the experimental chambers wear pajama-like outfits to keep out germs



Desired weather conditions for each of the many growing rooms are created by means of this panel



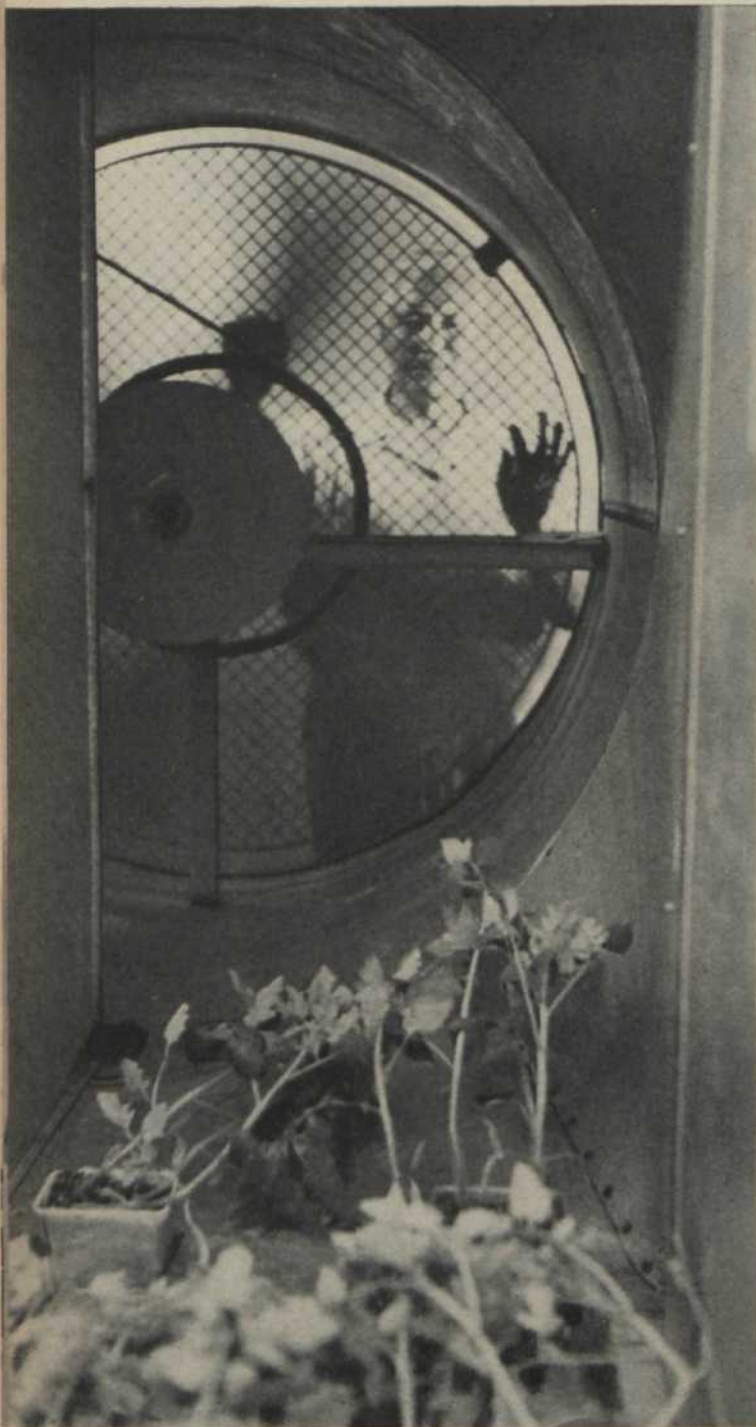
A watering device sprays down all roof tops to filter out some of the heat given off by the sun's rays



Dr. F. W. Went, counting flowers from a Morea plant, is the enthusiastic director of research

ATOMIC AGE GREENHOUSE

continued



An important part of the \$500,000 Earhart Plant Research Lab is a wind tunnel capable of a 20-mile an hour blow

with its leaves, and water and minerals from the earth with its roots. From these raw materials, by a process called photosynthesis, it manufactures chemical compounds: sugar, fats, protein, vitamins, etc.

In a year's time the botanical chemical factories of the world produce around 200,000,000,000 tons of these materials. All of the things man makes in that time, by hand and by machine—his steel, ships, sealing wax, punchboards, and airplanes—are only one one hundredth of what the plants make by photosynthesis.

And yet plants operate at an efficiency rate of less than two per cent, a figure which in industry would be intolerable. That is, of all the sunlight falling on the plants, they make use of less than two per cent. Theoretically, under ideal conditions, they are capable of using about 30 per cent.

The classic question has been how to make them do it. To find the answer it is first necessary to get control of the things in a plant's environment that affect its growth. Scientists have dreamed of that control for centuries. It was not possible, until recently, because light and temperature eluded the rigid command necessary.

In the Pasadena establishment, opened in June, 1949, this control now has been attained. "It is the first laboratory in which plants can be grown under practically every climatic condition under which plant growth is possible," declares Dr. Frits W. Went, the somber but inwardly enthusiastic Dutchman who directs the place. "Never before were all possible climatic factors, such as light, temperature, humidity, gas content of the air, wind, rain, fog simultaneously and independently controllable."

Because of the unique inquiry this makes possible, the laboratory has been named the phytotron. This stems from the Greek "phyton," for plant, and from "cyclotron," which, Went explains, "fulfills about the same function in physics as the phytotron does in the plant sciences."

Such a place, first of all, must be as clean as a surgical instrument. An infection would throw off the play of normal influences on a plant's activity, making observations meaningless.

The interior of the phytotron, therefore, probably has the finest air this side of Elysium. The building is sealed except for the front door. It breathes through a single vent, drawing the air through three successive filters which can catch even the most elusive component of smog. Finally, air pressure inside the building is kept slightly higher than outside, so that if there is any leakage, and because of the unavoidable necessity to unseal in order to come and go, the air movement is outward rather than inward.

All things brought in are first treated for decontamination. Planting materials are sterilized with steam, tools and whatever else can stand it are put into a gas chamber and fumigated with deadly methyl bromide.

Unfortunately, the gas chamber is not practical for use on people, among the worst carriers of mischief. Hence, access to the interior is through two washrooms divided in the usual way, which serve as decontamination chambers. Here, everyone changes clothes before he goes any further. Workers get into a set of sterilized garments kept in lockers. Visitors put on the surgeon's ensemble described.

Everybody washes his hands. This is chiefly to get rid of the tobacco mosaic virus, the biggest infection worry. It will attack almost any member of the tobacco family, which includes tomatoes and

potatoes, and it cares not whether it travels directly to the kill or leisurely hitchhikes roundabout, taking 70 years to get there; it lives that long. A plant hit by this killer must be thrown out.

This is why the visitor who proffered cigarettes inside was hastily swept back into quarantine. Cigarettes used on the premises are steam sterilized and tipped red for quick detection of the wrong kind.

By such vigilance aseptic conditions are nearly as well kept as control of the positive factors. The plants are grown in a mixture of gravel and vermiculite, both inert, impregnated with a standard nutrient solution. Unlike soil, which runs to diversity in composition, this affords total uniformity of nourishment.

The water the plants get is made similarly uniform by deionization; this makes it at least as pure as distilled water.

With identical food and drink assuring equality of advantage to the plants up to this point, juggling begins in the quantity and quality of the other influences in their lives. Most important of these things are temperature and light.

Temperatures in the phytotron's 15 growing rooms, each independently air-conditioned, range from just above freezing to tropical. Light varies from nature's own in six of the rooms to whatever is wanted, from blackest midnight to brightest noon, in the other nine, using fluorescent lighting. Control of temperature and light is held to a tolerance of a fractional degree and candle power.

The room from which mastery over this climate shop is held is a futuristic bewilderment of knobs, switches, buttons, dials, flashing lights, and recording devices. "It's like CIC (Combat Information Center) on a warship," grinned Arthur W. Galston, who still seems more the junior grade Navy lieutenant he was in the last war than the doctor of philosophy in plant physiology and associate professor he is now.

The basement, with its blowers, boilers, conduits, and general uproar, could be the engine room of Dr. Galston's warship—it once was presided over by a retired Navy captain. Here are rooms for making weather. In one, light- to pea-soup fog can be made, or rains, shading from a gentle drizzle to a cloudburst. In another is a wind tunnel, geared to turn up a caressing breeze or a 20-mile an hour blow. In two other chambers the exact quality of the prevailing Southern California air can be duplicated.

Since the seasons of the outside world mean nothing in the phytotron, the days are numbered in sequence from the date operations began. Instead of hours and minutes, the days are divided into 100 parts of 14 minutes and 24 seconds each, called centidays. Clocks showing the time in these terms are set to go on numbering the days for 30 years. Their readings are included in pictures taken of the plants at measured intervals.

When growth is finished the plants are dried, then ground up and weighed, each in toto and by components, on scales balanced to a thousandth of an ounce. The materials are then chemically analyzed and the story entered on cards. There are 40 cards for length and weight measurements alone.

What secrets has nature yielded through this atomic age hothouse up to now? The big one is this, as stated by Went:

"Climate is at least as important in the development of plants as diseases, pests, heredity, soil conditions and nutrition. In the past climate has not been sufficiently emphasized as a factor."

It turns out that temperature and light, climate's two main assemblies, are a kind of fulcrum on which plant behavior is balanced with a delicacy which astonishes even Went.

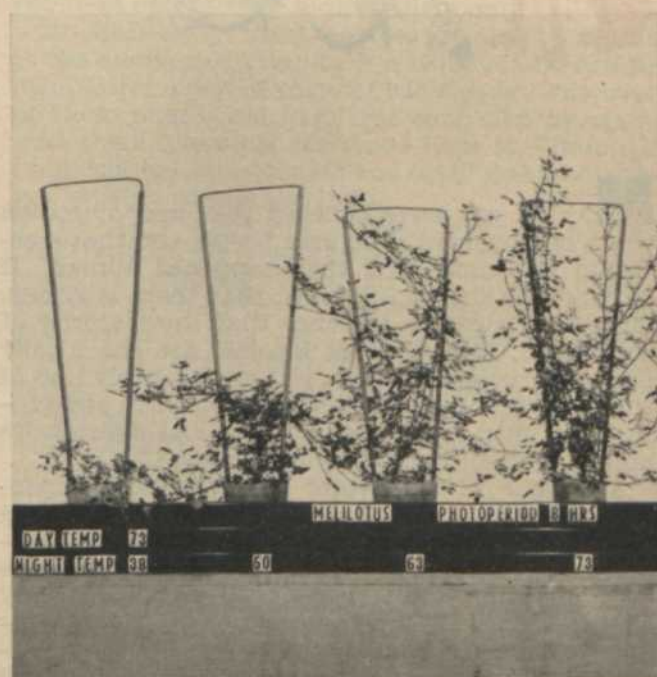
He first studied plant life under his famous botanist father at the University of Utrecht. After earning his doctorate in 1927, he became associated with the Botanic Gardens in Buitenzorg, Java, and then served as director of Java's Foreigners' Laboratory for plant study. He has been with Cal Tech since 1933.

So sensitive are some plants to temperature and light that they react to a change of a single degree, and to as little as one tenth of a foot candle of light.

The power of temperature is dramatically shown in a room filled with (Continued on page 66)



Vegetables are photographed at various stages of growth and pictures are filed for a comparison



Variations of temperature caused the difference in the development of these sweet clover plants

Is your wife starving alone

By HARRY HENDERSON



MAYBE you have believed that poor nutrition was a monopoly of slum area people and that starvation was something that happened abroad. If so, you'll be shocked to learn that there is strong, mounting scientific evidence that the majority of Americans, regardless of income, are chronically undernourished. In fact, you are probably one of them. A recent study shows that business and professional men suffer from serious diet deficiencies and their resultant physical afflictions.

And your wife, however charming and apparently healthy, may actually be starving. Repeated studies show that the American wife is the worst-fed person in the country. Four out of five wives are not getting sufficient foods. One scientific study of the eating habits and nutritional status of middle-income, well educated Philadelphia families—one third of them with incomes of more than \$5,000 a year—revealed that nearly 60 per cent of the wives were underweight, 25 per cent of them seriously so.

Half the wives were not getting even three quarters of the body's mineral requirements. And a third were not getting sufficient calories to do their work!

Interestingly, the same study revealed that the men, mainly business or professional men, were much better fed than the women although theoretically they all ate the same food. The better physical condition of the men finally was tracked down to the fact that many ate a substantial "businessmen's lunch." Their wives, on the other hand, tended just to "nibble" at something. Many said that because they ate lunch alone, they didn't bother with anything more than a jelly sandwich. The so-called "Battle of the Sexes" was a factor in the semistarvation of the wives, the men's food preferences dominating supper. Most wives cooked their husband's favorite dishes for that meal—usually meat-potatoes-and-pie—and then ate very little of them, taking only tiny portions themselves.

The studies which revealed these disconcerting

or with you?

Most men are handy with knife and fork, but it seems that women don't do so well.

Four out of five are underfed

facts are the work of Dr. Pauline Beery Mack, one of America's top women scientists and the 1950 winner of the American Chemical Society's Garvan Medal. This award, one of the nation's foremost scientific honors, was given to Dr. Mack for her development of an electronic method of calculating the mineralization of bones from X-rays. Her food studies, known scientifically as the "Pennsylvania Mass Studies in Human Nutrition" and sponsored by the Pennsylvania Department of Health, are internationally famous. They are the greatest effort to assemble data on eating habits and their relationship to physical health ever made.

Since 1935 more than 14,000 persons, ranging from relief recipients to millionaires, orphans, businessmen, miners, farmers, and white-collar workers, have gone through elaborate tests and supplied information on their eating habits in these studies.

"What these studies show," says Dr. Mack, "is most people eat too many of the wrong things and then pay a big bill in fatigue and poor physical condition. You don't have to be rich to eat well. In fact, poor nutrition is widespread among the rich because they substitute too many delicacies for staple foods."

Dr. Mack, who has enough academic honors to frighten a college president, has headed the Ellen H. Richards Institute at Penn State for 15 years. Recently she accepted the deanship of the College of Household Arts and Sciences at Texas State College for Women at Denton, Texas. A brown-eyed and jovial woman, she has stimulated generations of Penn State students with her enthusiasm for science and classroom wit.

To get funds for her scientific work, she has buttonholed legislators and tycoons. On the campus she is famous for her wit. Once, when lecturing on the molecular structure of certain chemicals, she noticed one sleeping student. She stopped and said, to a pretty coed near the top of the amphitheater, "Say, girlie, put your arm around that fellow next to you and see if you can keep him awake. I see I can't." The class went wild.

Her activities are so numerous that she resembles, one former student says, "a well organized tornado." For years she has driven hundreds of miles weekly to check widely scattered nutrition studies, speak before scientific congresses and women's clubs, and still managed to teach and produce important scientific work.

At Penn State, where she has been a campus figure for 32 years, there is a legend that Dr. Pauline Beery Mack does not exist. She is really, the saying goes, three people: Pauline, Beery, and Mack.

Dr. Mack's husband, the late Dr. Warren Mack, was a nationally known horticulturist.

The study mentioned in the opening paragraph covered the eating habits of 319 business and pro-

fessional men who participated in the Pennsylvania Mass Nutrition Studies.

They fell into two age groups: Group I included men between the ages of 40 and 46 years; Group II, those between the ages of 47 and 56 years. There were striking differences between the groups as well as serious over-all diet deficiencies.

The tests on which the study was based included more than 100 different measurements, such as body weight and proportions, mineral density of bones, and chemical tests for red cell blood counts, ascorbic acid, and all vitamins, particularly the important B-vitamins. A battery of scientists and technicians made the observations and tests.

The effect of the bad eating habits of these business and professional men showed up some serious physical conditions. One of the worst deficiencies discovered was in the transparency of the film tissue covering the eyeball. This tissue, normally transparent, was translucent, and actually opaque, in some areas in the eyes of *all* of the men. And the older group suffered much more in this respect than the younger men.

In tests of the eyes' ability to adapt themselves to semidarkness after exposure to bright light—such as you might experience on entering a theater—only 27 per cent of the men between 40 and 46 years had a good rating. But only eight per cent of the older men achieved this rating, and 54 per cent were at the bottom of the ladder—virtually sightless on entering a dimly lit room.

Dr. Mack says, "these troubles are directly related to the amount of Vitamin A consumed and are the cumulative effect of years of bad eating. The wives of these men could help this condition by seeing that their husbands get foods high in Vitamin A—especially liver. Carrots and leafy green and yellow vegetables will also help.

The study revealed that few business and professional men ate liver, and that the group averaged only 1.84 pounds of the proper vegetables weekly—considerably less than the recommended amount. The men also rate very low in Vitamin C, which comes from citrus fruit, tomatoes, and green leafy vegetables, and certain uncooked vegetables such as cabbage. About 20 per cent of the men were suffering from serious Vitamin C deficiencies, which had affected their teeth, the condition of their gums, the healing of scratches, and many other body functions.

"Vitamin C is the only item in which the wives of these men surpass them," says Dr. Mack. "If the men would eat more fruit, raw salads, and vegetables, which they call 'rabbit food,' their nutrition would improve and they'd feel better."

The men in both groups averaged about 40 ounces of meat a week—lower than the optimum suggested by nutrition ex- (Continued on page 62)

CALIFORNIA moves the RAIN

By FRANK J. TAYLOR

CALIFORNIANS talk nonchalantly of the biggest crops, the largest trees, the most colossal bridges, the highest mountain peak in Mt. Whitney, the lowest sink in Death Valley, and various other "firsts," and on occasion are suspected of telling the biggest whoppers. Among other things, the Californians can claim to be the greatest river movers on earth. Dissatisfied with the way nature arranged their rain crop, they are revamping their moisture facilities in a long-range modification of the state's geography. Where easterners think nothing of piping natural gas 1,000 miles from Texas, the Californians take it for granted that rivers may be moved equally great distances, and over mountain ranges as well, to transform semideserts into flourishing farm lands and cities.

They are even suspected of having designs on their neighbors' water. One of their more fantastic dreams has been to bring water from the Columbia River into Southern California. Some time ago, at a meeting of California water users, this pipe dream was under discussion, when the chairman invited a visiting Oregon water engineer to give his opinion of the feasibility of the proposition.

"Well, I don't see any reason why you couldn't dip a siphon into the Columbia River near Mt. Hood

and lay a long pipeline behind the Cascade and Sierra Nevada ranges and drop it down into Southern California," said the Oregonian. "Then, if you fellows can suck as hard as you can blow, you'll get all the water you want."

The Californians have concluded, as the result of a comprehensive survey known as the State Water Plan, that aside from the 5,000,000 acre-feet a year they divert from the Colorado River, moisture that originates in the Rockies 1,000 miles distant, they don't need to covet their neighbors' water. They have perhaps the finest water crop in the country—71,000,000 acre-feet a year on a half-century average falls on the state in the form of rain and snow. Despite their prodigious irrigation, Californians are putting only part of this potential to productive uses. The rest pours wastefully into the Pacific Ocean.

Harvesting this crop of water calls for some Superman engineering, none of it unfeasible but all of it costly. More than \$1,000,000,000 has been spent already, making a start at rearranging the rain in California. To complete the job will cost another \$1,000,000,000 and probably more at pyramiding construction costs.

Though this seems like a lot of money to spend on



Many areas have solved harvest problems with manpower, more efficiency, but none has gone in for the fantastic plan that highlights the Golden State's drive for water



water, Californians get it back fast and often. The state's farm crops, nearly all of them dependent on irrigation, return more than \$2,-000,000,000 a year. Industries which have come with the state's population growth earn even more. Agriculture, industry, and the 10,500,000 inhabitants of the state, a population projected to 20,000,-000 by 1975, are dependent on man-made rivers that don't dry up.

Thus the harvesting of water is the No. 1 business to the Golden State. It is more than that—water is life itself in the semiarid sections where most of the people choose to live. Two thirds of California's water crop falls in the northern one third of the state, where fewer than a fifth of the people live, and less than one third of the farm crops are grown. The

This was a revolutionary idea, using a vast, porous valley as a natural underground storage reservoir. Since then Californians have learned to regard most of their valleys, which are silted-up ancient lakes, as natural reservoirs. Water underground is considered as valuable as water in a man-made lake or ditch. Nearly all of the state's rain crop falls during the six months from October to April, and any kind of storage that will keep the winter and spring floods from flowing out to sea is desirable.

In the Santa Clara Valley, for instance, at the southern tip of San Francisco Bay, engineers have built earthen dams across the streams that once flowed down to the bay in torrents during the rainy season. No attempt was made

to line the bottoms of these reservoirs, the idea being only to retard the runoff until it could percolate underground to rebuild the subterranean water level, from which the pumps were lifting water faster than the rains renewed it. Water from the percolation basins raised the underground level ten to 20 feet throughout the valley, and thus halted the "mining" of moisture resources. To further replenish the natural supply, the county employed cloud seeders to in-

crease the precipitation over mountains around the valley.

This simple type of water harvesting was suitable in certain watersheds with the right natural geography. Most of the water that catapulted out of the mountains in spring floods could be captured only by engineering projects involving massive concrete dams, powerhouses, canals to reroute the water, and often pumps to lift rivers over hills and sometimes over mountains. The State Water Plan, first projected in 1930 by State Engineer Ed Hyatt, now retired, proposed to correct the errors of nature.

By that time Southern Californians had demonstrated that moving rivers over mountains, even at great cost, pays off. The concentration of population, industry, and wealth in that area was made possible by the two great

aqueducts. The 500,000 population in Los Angeles had grown to 1,238,-000. Shortly after the Owens Valley Aqueduct was completed, Southern Californians realized that even with their sizable man-made river tapping the Sierra Nevada snows, they would be short of water soon. They already had dammed every stream whose flash floods swept out to sea, and the only new source in sight was the Colorado River, 340 miles to the east.

At the time, the 1,400-mile turbulent Colorado was a menace to California. After accumulating in average years some 16,000,000 acre-feet of water in four Rocky Mountain states, the muddy Colorado carved its way through Arizona, creating a mile-deep canyon that is one of the world's wonders, only to break its banks and flood thousands of acres of farm lands in California's Imperial Valley. The productive farms of the Imperial, a prodigious winter vegetable basket, were created about 1900 by diverting Colorado River waters by gravity onto 500,000 acres of sun-baked desert that lay below sea level.

There were two things wrong with this arrangement. One was that the Colorado flooded in the late spring and early summer, after the Rocky Mountain snows melted, then fell off to a relative trickle the rest of the year. During two years, 1906 and 1907, when the river broke its banks, the Colorado rampaged uncontrolled into the Imperial Valley. The flood waters recreated the ancient Salton Sea and threatened to convert the valley once more into an arm of the Gulf of California.

Alarmed, Southern Californians undertook to harness the river with 726-foot Hoover Dam, completed 300 miles up river in 1936, the highest dam ever built. Though Hoover Dam was constructed under the direction of the U. S. Reclamation engineers, it is underwritten largely by Southern Californians, who contracted for the bulk of the electricity generated by the turbines in its powerhouses.

Hoover Dam created vast Lake Mead, backing up the water of the Colorado 100 miles in the main gorge and its side canyons. The lake impounded 31,000,000 acre-feet, a two-year flow of the Colorado. By releasing the water gradually, the steady flow of the river is maintained. With the Colorado thus harnessed, Southern Californians were ready to embark on their main objective, moving the

(Continued on page 73)



Friant Dam, the country's fifth largest, is one in the giant program to irrigate dry regions

problem is, how to correct this geographical oversight by moving as many of the state's 71,000,000 acre-feet of water as possible from 100 to 800 miles southward.

The 5,400,000 Southern Californians, roughly half of the state's population, who live in the dry one fifth of the state lying south of the Tehachapi Mountains, made the first start at river-moving four decades back with the Los Angeles Aqueduct. When completed in 1913, at a cost of \$23,000,-000 it was considered a marvel of engineering. The 330-mile ditch diverted water from Owens Valley, at the eastern base of the Sierra Nevada range, carried it across the Mojave Desert and through the San Bernardino mountain range into the San Fernando Valley, where the engineers let it percolate into the ground, to be pumped out as needed.

ALBANY'S WAY OF MAKING HAY

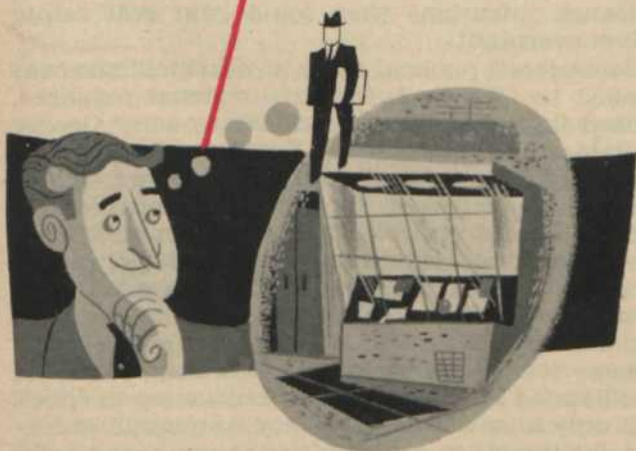
By J. C. FURNAS



ZONING is one field in which the New York State Department of Commerce materially aids industry



RETAILERS get heavy dividends from surveys of store customer relations and shopping trends



STARTING a new business? They will help you select the most desirable spot, arrange contracts

HAROLD KELLER, commissioner of the New York State Department of Commerce, recently had a scare. The legislature was trying to saddle his department with regulatory powers over some phases of the state's economy.

This is the Empire State but Keller is no empire builder. Already unhappy because his job includes some regulation of aviation, he is determined to keep anything more of the sort out of his busy organization. So far he has succeeded. His function, as he conceives it, is to be not a big stick-wielder but a midwife-cum-Beatrice Fairfax for business and industry.

All over the state his department's local representatives or special emissaries from Albany show daily what imaginative give-and-take can accomplish. Sister state agencies share his sentiments and reflect special angles of the general approach.

New York is no economic Utopia. It must cope with the largest and most heterogeneous population in the Union. It is distractingly split between the nation's largest city and a highly diversified up-state area. Its greatest industry—the apparel trades—is chronically seasonable and unstable. Such troubles—and dozens more—make it all the more remarkable that Albany so consistently prefers lubrication to brass knuckles.

This Department of Commerce, fathered by United States Sen. Irving M. Ives when he was majority leader of the State Assembly, does some usual things. Its tourist propaganda is crisp and well-aimed. Its post-World War II battle for new plants and industries has shown good results. But in those fields you would expect successful work from a state with New York's kind of money to spend and wealth of expert promotional talent.

The unusual crops up with New York being the only state consistently to maintain a full-time Department of Commerce office in Washington. The staff has been called "five percenters who don't ask for five per cent." Their work has been essential in the state's post-Korea efforts to align small industry with renewed defense production.

But the real payoff is within the state—where retailers, for instance, get heavy dividends from Commerce's shopping-habit surveys. The theory is that "modern competition is as much between communities as between individuals"—realistic recog-

nition of what mail order and motor transport have done to buying behavior.

One afternoon last spring Sylvester J. Balassi of Westchester's County Trust Company, president of the Yonkers Chamber of Commerce, finished convincing the right people that Yonkers needed such a survey, picked up the phone and called Albany. He says it was like rubbing Aladdin's lamp. Next morning a survey specialist with sample questionnaires and procedure suggestions was there. In a few months Yonkers merchants will know more about their customers' opinions of their sales forces,



THE WOMAN'S PROGRAM counsels those who want to begin operating an enterprise of their own

stocks, price and credit policies, locations and facilities than could be learned in 20 years of trial and error and surmise.

In four years the department has conducted more than 50 such surveys from Long Island to the Great Lakes, and out of that experience have developed sound techniques. Commerce first tailors a standard questionnaire to local conditions under consultation with local people. The next step is a luncheon, including the heads of women's groups that cross section the community's shoppers.

In Dunkirk, for instance, the list took in not only the local American Association of University Women and the Business and Professional Women's Club but also the Parent-Teacher Associations and the women's auxiliaries of the fire department and veterans' and fraternal organizations.

The women usually are ready for an opportunity to register their members' squawks where it will do the most good. Local stores don't stock a wide variety of fresh fish? Write it down. Why doesn't some store set up a nice rest room for shopping mothers with children? Write it down. Why not keep banks open on late shopping nights? Write it down.

The filled-out questionnaires go to Albany to be analyzed and checked for special significances against the previous reactions of comparable communities. Albany returns them and the analysis to the local sponsors—usually the Chamber of Commerce or merchant's association—in confidence. Publicity for the findings, steps to remedy sore spots, are up to local enterprise. But Commerce makes it clear that it is willing to help.

If shoppers complained about parking facilities, Commerce will send a man versed in parking reform. If they called local sales help surly or inattentive, it will obtain a personnel expert to advise employers and, if asked, will arrange evening courses in customer relations for sales forces. If the ladies think the shopping center unattractive, it will supply experts from the glass, lighting and exterior decoration fields to sketch out changes.

Tarrytown, for instance, was losing business to White Plains and New York City. Its 1947 survey revealed that customer relations were poor, additional types of stores were needed, and shoppers resented the fact that local returns policies were less liberal than those of the big-town stores. Four years later the picture is changed. Tarrytown's sales help are more polite, and the town now has the stores called for.

The fix-it campaign included a town-wide open house complete with door prizes—you can't buy anything, just browse and get acquainted. Thus one mother discovered that the line of child's clothes she had been driving to White Plains to buy had been available in Tarrytown all the while, and a local doctor found that the brand of shoes he bought in New York City had always been on Tarrytown shelves.

Aware that many new people have moved in since 1947, Tarrytown is now considering a new survey to explore further improvements. Commerce will be there helping.

Local merchants are sometimes annoyed when their anonymous customer-critics call their stores shabby or their stocks dull. But displeasure usually wears off in favor of getting something done. In other cases things go briskly from the start. In one town the railroad agent happened to get a glance at the first batch of returned questionnaires and found every one labeling the railroad station an eyesore. He went so energetically to work on the head office that, by the time the survey was added up, the old station was already asparkle with new paint and polish.

"How much will it cost us?" is the local sponsors' usual question. They blink and beam when the answer is: all you pay for is the luncheon for the ladies and duplication of questionnaires.

"You pay taxes, don't you?" is Commerce's attitude. "Well, this is one useful return on your tax dollar."

The official slogan is: "New York Means Business." It could be: "Ask and ye shall receive." Take the zoning needs of the Corning area, which includes half a dozen closely grouped municipal jurisdictions. Recent expansion of Corning Glass and Ingersoll-Rand, the two big local industries, calls for more and better housing nearby. The city of Corning itself had set up zoning that met requirements for federal housing financing. But Corning is already well built up and its zoning pattern did not mesh with the needs of South Corning, Riverside, Painted Post, Erwin, et al.—mostly semirural communities, all unzoned and so defenseless against nuisance intrusions that could ruin real estate values overnight.

Commerce's regional office in nearby Elmira was applied to. Waldo J. Ehlman, regional manager, rubbed the lamp. Down from Albany came George B. Robinson of Commerce's Bureau of Planning to set up seminars for zoning-minded people from the communities involved. He stressed not only how to zone as an abstract problem, but, even more important, how to coordinate separate municipal zoning schemes to make sense for the area as a whole in terms of the local map, payrolls, traffic patterns and so forth.

Some results are already in. Corning, Riverside and Painted Post have interlocked zoning in effect. It is only a matter of time—and automatic education for the other communities as nuisances begin to threaten—until the deal is consummated.

Ehlman maintains (Continued on page 68)

I make no butts about it



By **ALFRED TOOMBS**

IT IS high time someone came to the defense of the goat. In the American legend, no animal has been so grossly maligned. It is pictured as a ragged, smelly, ill-natured miscreant, dwelling atop a trash heap. Some of my best friends are goats and I think they've been the butt of this joke long enough.

Goats are appealingly beautiful animals, docile and affectionate as good dogs. The female goat has no more B.O. than a diving queen just up from the bottom of the pool. In their eating habits, goats are as fastidious as dowager ladies. A goat would no more eat a tin can than would Joe Stalin put his life's savings in American Tel. & Tel. They won't even eat their favorite food, if it's been dropped in the dirt. I can tell when a chicken or a mouse has walked through the pans out of which my goats eat. The goat will take one sniff of the food and stalk away haughtily.

Goats produce milk with superlative efficiency. When my friends learn that I keep milk goats, they usually look at me with surprise and demand:

"What do you do with the milk?"

Long experience has taught me that the only way to answer this is to return the look of surprise and say nothing. Almost invariably, the person who asked the question will then say reassuringly:

"I understand it makes wonderful cheese."

As a matter of fact, the only goat's cheese I have ever eaten was

a concoction imported from Norway, which tasted a little like sweetened peanut butter. I am told that good cheese can be made from goat's milk, but none of the world's best known cheeses is dependent on goat's milk and its use in cheese making is limited.

What goat's milk makes is a superior beverage. When properly handled, it cannot be distinguished in flavor from cow's milk. It is naturally homogenized and, because of its soft curd, is more easily digestible than is cow's milk. Thousands of babies, who cannot tolerate cow's milk, are alive in this country today because they were able to assimilate goat's milk.

It is held in high esteem by people who claim it has cured anything from arthritis to eczema. The list of testimonials submitted by people who have bought a couple of goats and then thrown away their crutches, spectacles or special diets would be the envy of any patent medicine manufacturer. But sober-sided goat keepers don't tout their product as a wonder cure. They merely observe that anyone, who takes time to make friends with a couple of goats, who quits the rat race long enough each day to milk them, and spends a little time out of doors with his pets, is bound to feel better.

It is estimated that 60 per cent of the milk consumed by humans in the world is produced by goats. Commercial goat dairymen sell a milk of uniform flavor and quality. But goat's milk bottled by

small herd owners may come in as many flavors as ice cream.

I have helped to pay the feed bills for my goats by wagering skeptical friends that they can't tell the difference between a glass of my goat's milk and a glass of cow's milk. One day, a friend won the bet three times running—without even tasting the milk. One of my helpful children, I discovered, had tipped him off that goat's milk has a chalky white color, compared to cow's milk. After whomping the child, I ran the test blindfolded and won back half of my money.

The goat was perhaps the first animal to be domesticated. In other parts of the world, a good producing goat attracts the same favorable attention as does an eight-cylinder red convertible in America. But in this country, we've always had plenty of room to pasture cows and it has not been until recent years that the goat has become an important milk producer in America.

The native American scrub goat was never developed as a milker. Millions of these Angora goats are kept out West and sheared for mohair. Otherwise, Americans have kept goats as pets. Many of them were neglected or tormented by children and became ragged and ill-natured. When abandoned to forage for food, they lived on what they could find and might nibble at the paper wrappers on tin cans to get the taste of glue.

But the modern dairy goat is a rich relation of these sorry creatures. Today's dairy goat is chiefly the issue of one of the four principal breeds which have been im-

(Continued on page 54)

*How to make kids stay in school
and like it is a critical problem
—but not so in Bloomington, Ill.,
where absentees sometimes get*

A RED ROSE FROM TEACHER

By **JOHN KORD LAGEMANN**



Getting to the bottom of each child's problem is the job of a guidance director



Superintendent George N. Wells wants each to feel that he "belongs" in school



School band and other activities were reorganized to pay their own way, without cost to participants



PHOTOS BY ARCHIE LIEBERMAN FROM BLACK STAR

YOU CAN sum up the educational methods of George N. Wells in one word: People. In Bloomington, Ill., where Wells is superintendent of schools, those simple methods (all 36,000 of them) have gone a long way in solving a problem that's become critical in most American communities: How to close the gap between school and community and combine their resources to help youngsters discover and make the best use of whatever individual ability they happen to possess.

Out of every 100 youngsters in our public schools, only 50 finish high school, 20 go on to college, ten graduate from college. Today, when management, government and labor are crying out for people who've learned how to use their heads, that represents a dismal waste of human resources. The figures coincide with Bloomington's record eight years ago when Wells took over the town's 11 schools. Now, thanks to what he calls "community involvement," the holding power of the local schools has risen from 50 to 85 per cent.

That means that each year in this one small mid-western city, some 80 to 90 boys and girls who would have been dropped by the wayside under the old system go on to achieve a high school diploma. For the kids it's like money in the bank: with it they are at least twice as likely to earn \$3,000 a year or better than without it. The community gains just as much by turning out happy, well adjusted citizens making the best use of their talents instead of costly misfits nursing a grudge against a society in which they failed to find acceptance.

"Statistics," Wells says, "don't mean much unless you meet them in person." I made a point of meeting several of these flesh-and-blood statistics.

One was Jimmy W., a graduate student of bio-

chemistry in a nearby university. Because of family pressures, Jimmy would have dropped out of school at 16 when the law allowed, and worked at a succession of odd jobs like his brothers—if the school hadn't recognized his near-genius I.Q., helped him develop his bent for mathematics and chemistry beyond the limits of the ordinary high school curriculum, tactfully brought his parents around to an appreciation of their son's unusual gifts.

Further down the I.Q. scale was Wilbur. He received a curriculum of manual arts courses designed to help him earn his own way in life. Family circumstances required him to work part time, and school and community cooperated to let him try out in local businesses.

Wilbur tried one job after the other—until a teacher visiting his home noticed potted plants growing on every window ledge. The boy had planted everything he could pick up in the way of cast-off root or stem, somehow coaxed them into leaf and bloom. He was all thumbs—and every one of them was green.

At his next job—in a local nursery—Wilbur for the first time in his life was completely happy, and so was his employer.

Then there's Mary E., a graduate nurse in a large midwestern city. During her high school years Mary's family broke up. Mary lived with a succession of relatives. Four months before graduation she was forced to find new quarters.

The high school guidance director traced her to a lunch room in a city many miles distant, where she was waiting on counter, brought her back to a job as part-time maid in a local home, helped her catch up in her studies in time for graduation, and finally saw her off to a (Continued on page 70)

the fish that spoke English

By PAT FRANK



WHEN at evening the tide changed, and the wind from the sea yielded to the land breeze, Gerald K. Hacklefarber caught his first fish, but by then it was time to pull anchor, start the kicker, and go home. It was a small fish, and even Hacklefarber, who never gave up anything, wondered whether he was worth keeping. He was a whiting, called frost-fish in more northerly waters, with a sensitive aquiline nose, and alert gray eyes that shone like iridescent pearl buttons.

Hacklefarber finally tossed the fish into his bucket. "At least," he told himself aloud, "I'm not skunked." When he was alone, Hacklefarber often talked to himself aloud. This did not mean, necessarily, that he was crazy. Hacklefarber, by nature, was a gregarious man. But, being a bachelor and branch manager of a small loan company, he regarded mankind with skepticism, suspicion and some mistrust.

He could not afford to have close friends. One might ask him for a loan, and his business judgment might be swayed by friendship, with consequent loss to the company. So, he talked to himself, and on occasion to his landlady, the widow



PHIL DORMONT

Bashor, her 11-year-old son, Peter, and to Marylu Pennington, the shapely receptionist in his office, whom he silently and secretly loved.

"Hey! Give me some water!" the fish said.

Hacklefarber stared, unbelieving, into the bucket. He inserted his index fingers into his ears and listened for more voices, or other queer sounds which would confirm his belief he was losing his mind. He heard nothing. The whiting blinked his gentle eyes inquiringly, and Hacklefarber removed his fingers from his ears.

"Please!" said the whiting. "More water. Do you enjoy torturing people?"

"You're not people," said Hacklefarber. "You're only a fish." This did not sound convincing, even to him.

"That's precisely why I need water. I'm a fish," said the whiting. His voice was plaintive, yet edged with temper.

There was no doubt that the whiting was distressed, its gills were working frantically. Hacklefarber filled the bailing can with water, and dumped it into the bucket, but his hands were shaking so that half of it slopped into the bottom of the boat.

"Well, I must say that with a whole ocean full of water you are pretty stingy," said the fish. "But it's some relief, anyway. Of course, I was a fool to snag myself on your hook in the first place. It was so obviously a hook."

"I always bait very carefully," said Hacklefarber, indignant.

"Nuts!" said the whiting. "If I hadn't been absolutely famished, I'd never have touched it. No fish in his right mind would take your hook. Nothing but mudfish and catfish and sting rays and toadfish and garbage-eaters like that."

"Aren't you being insulting?"

"I'm just being candid. You use a size 4/0 hook that would hold a tarpon, and stick on a whole shrimp, shell and all, that would choke a shark, and use a heavy wire leader that any smart fish can spot a nautical mile away, and expect to catch fish!"

"I caught you," said Hacklefarber smugly.

"I was blinded by hunger," the whiting explained. "That last northeaster swept the beach bare of food."

"A likely alibi," said Hacklefarber. He spoke in a firm tone, as if rebuking a white-collar indigent

unable to pay the monthly instalment on a \$300 furniture-secured loan. "Know what I'm going to do?"

"No."

"You're the only fish I've caught today, and I'm going to take you home and eat you, or maybe feed you to Mrs. Bashor's cat. I am a tough luck fisherman, and I'm not throwing anything back, even when I imagine I've been having a conversation with 'em."

The whiting raced around the perimeter of the bucket, but there was no way out. Finally he stopped, his fins fanning with his exertions, and said, "Maybe we can make a deal?"

"What kind of a deal?" asked Hacklefarber suspiciously.

From the bottom of the bucket the man's form was distorted and magnified by a lens of water. To the fish, the man resembled a pot-bellied ogre with bespectacled eyes large as the shell of the giant clam. Actually, Hacklefarber was a scant five-foot-six, and his flesh was flaccid with middle years, but he was formidable to a fish. So the whiting attempted to be as persuasive as a carnival pitchman.

"Suppose," the whiting began, "that I told you all the secrets of the sea? Suppose I revealed the art of fishing to you, from the fish's viewpoint? Know what would happen?"

"No. What?" Hacklefarber inquired.

"Why, you'd be the greatest fisherman in the world. You'd win every tournament. You'd be elected president of the International Game Fish Association. By acclamation."

Hacklefarber's mouth opened, but no sound came. He seemed stunned, and the fish, sensing his opportunity, continued:

"Suppose I told you exactly when the sea trout will hit a plug—date, time, and tide? Suppose I disclosed the feeding habits of the big channel bass? Would you like to know what lure will make blues strike like mad dogs? And what bait is irresistible to the stripers? And what attracts the grandpapa pompano?"

"Why, of course," said Hacklefarber. "But what's the catch?"

"No catch," said the whiting. "A clean deal. All I want is my freedom. I'll tell you everything you want to know about fish, and fishing—except how to catch whiting. Can't be a traitor to my own species. Then you return me to the ocean."

"It sounds like a good proposition," Hacklefarber admitted. It was growing dark. If he wasn't back soon, Mrs. Bashor might call the police, or even the Coast Guard. "Look," he addressed the fish, "whatever your name is—"

"Just call me Whitey."

"You can call me Hack." This had been his nickname in high school. "Now look, Whitey, I've got to get home right away. This is Saturday night, and I always eat out on Saturday nights. Matter of fact—"

"Matter of fact what?"

"Yesterday I almost asked Miss Marylu Pennington to have dinner with me."

"Why didn't you?"

"Mr. Pollock wouldn't approve. Mr. Pollock is president of the People's Friend Loan Company. He has a strict rule against mixing social life and business. I think he's against love, altogether."

The fish waved his tail impatiently. "I don't want to interfere with your plans. How about just letting me off here?"

"Oh, no!" said Hacklefarber. "We have a deal. I'm going to take you home with me. Then, when I've learned everything necessary, I'll put you back in the ocean."

Hacklefarber maintained a spartan two-room apartment on the second floor of the widow Bashor's clapboard house at the ocean's edge. The porch light was glowing when he put his foot heavily on the first step.

Mrs. Bashor, who had been watching from the living room window, threw open the front door. Some time in the past, she had been what is usually called a "wholesome blonde," a midwestern girl with corn-colored hair and a sturdy figure. Through the aid of modern chemistry, she was still a blonde and her figure was even sturdier.

"My goodness, Mr. Hacklefarber," she said. "Where in the world have you been? I was worried sick?"

"Terribly sorry, Mrs. Bashor," said Hacklefarber, heaving the bucket up a step. Mrs. Bashor often professed to worry about him, and Hacklefarber knew her concern exceeded the normal interest of landlady in tenant. But he had no feeling for her as he had for Marylu Pennington, who was merry and slender, and carried the streak of gray in her hair like a proud pennon.

Pete, ducking around his mother's rear, noted the weight of the bucket and said, "Look, he's got a catch!"

Mrs. Bashor said, "Well, how many?"

"Only one," said Hacklefarber.

"Must be a whopper," said Pete. "Big snapper, maybe. Or a drum."

Hacklefarber put down the bucket on the top step. "No," he said, panting, "just a whiting."

Mrs. Bashor looked into the bucket. "Well, I never!" she said. "You're not going to keep that little thing, are you?"

"Oh, yes, I am," said Hacklefarber. He edged past her and up the stairs. Once inside his apartment, he took refuge in the bathroom, and bolted the door. "Well," he said, speaking as much to himself as to the fish, "I guess this will have to be your home."

"You're not going to keep me in this bucket all the time, are you?" asked

(Continued on page 64)



Vinson backed away. "Get that thing out of here"



EDWARD BURKS

THE CAPITOL'S CAPITAL GUIDES

By TRIS COFFIN

AWED sight-seers were clustered around an impressive figure in the rotunda of the nation's Capitol.

He looked the part of a southern gentleman straight from the pages of "Gone With the Wind." His black hair contrasted with a startling white patch over his right eye. He wore a flowing black Windsor tie and carried a cane gallantly.

He was saying in a voice as clear and resonant as a cathedral bell, "One hundred and eighty feet to the ceiling is the masterpiece of the Italian genius, Constantino Brumidi, the Michelangelo of the Capitol."

The cane swept upward.

"This painting (a pause to collect attention) is the glorification of George Washington. A purple robe rests on his knees. Victory is on one side of our first President and Freedom on the other."

He stole a sly look at his audience. The two teen-age boys he mentally noted as possible trouble-

makers were quiet. The Brazilian journalist was rapt. But, most of all, the weather-beaten Kansas farmer was with him. His mouth had fallen open.

The dramatic voice flowed on, "The figures behind the father of our country are Shielded Liberty suppressing Kingly Power."

The farmer cleared his throat hesitantly as if to speak. The lecturer looked on him tolerantly and remarked, "Our friend from Kansas has an observation."

The farmer said in a tone of sheer wonder, "My Gawd, this place would shore store a lot of hay!"

Abrupt bursts of laughter smashed the mood the lecturer worked so hard to build. But he rolled with the punch and said genially, "Our friend is a practical man, and that is what has made our nation great. . . . This way, please."

The sight-seers trooped after

him. The lecturer, Col. (Kentucky, suh) Carl Miller, is a member of one of the most unique and exclusive fraternities in the world, the order of Capitol Guides. The 24, never more, dressed in conservative blue with identifying lapel patches of the Capitol outlined in gold thread meet the great American tourist public seven days a week, except for Christmas, New Year's and Thanksgiving.

Of these guides, the Maharaja of Jind, a visitor with rubies, emeralds and diamonds as big as thumbnails on a gold chain across his vest, punned a few years ago, "They are capital Capitol guides."

The men and women of the guide force are chosen almost like candidates for knighthood, because hundreds of thousands of voters get their impression of Congress from them. Senate sergeant-at-arms Joe Duke, who recently helped select a guide, said:

"They have to have the feet to tramp the marble halls all day long, the gift of gab to hold squirming high school kids, the knowledge to make it stick, and the dignity to match the scenery."

The guides explain the wonders of the rotunda, whisper over the echoing stone in Statuary Hall (the old House chamber where John Quincy Adams was stricken by a fatal stroke and Abraham Lincoln sat as a representative from Illinois), point out the great and near great in the two chambers, tramp five miles a day and answer hundreds of questions from 9 a.m. to 4:30 p.m. at the height of the season. The busy days begin about

(Continued on page 52)

Navy polishes its brass



By **ARTHUR D. MORSE**

The workday starts at 8:15,
often ends at midnight for officers
taking courses at the Naval War
College off Newport, R. I.



ONE fall day in 1884, Commodore Stephen B. Luce, the U. S. Navy's leading seagoing officer, arrived at his new command, an empty poorhouse near Newport, R. I.

"I christen thee the Naval War College," said the commodore. Then he marched into the frame building and began the task of raising money for heat, light, furniture and books, a detail Congress had neglected.

Today the original poorhouse is dwarfed by the gray granite buildings of the U. S. Naval War College, the oldest postgraduate service school in America. Towering above Narragansett Bay on Coaster's Harbor Island off Newport, it has incubated such fighting admirals as Nimitz, King, Halsey and Spruance. Like their famous predecessors the 180 hand-picked officers attending the 1951-52 class are being groomed as the global strategists of tomorrow. Their training should be of some interest to taxpayers who, faced with the Navy's \$13,-200,000,000' budget, are becoming more concerned about life in the poorhouse.

If taxpayers could get inside the Naval War College they would be shocked at the goings-on. Hardy sea dogs, their chests covered with combat ribbons, have forsaken gun turrets for the classroom. Pilots who once worked over the Japanese fleet now work over their intellects, and "Let's go to the seminar" has replaced "Full speed ahead" as a Navy battle cry.

Meanwhile prominent civilians flit through the classes haranguing and criticizing the brass without being thrown in the brig and the cultivation of minds supplants the cultivation of rank. Strangely enough all this is wonderful for the taxpayer, for the Navy and for the memory of Alfred Thayer Mahan.

It was at the Naval War College in the 1880's and early 1900's that Captain Mahan prepared his monumental studies of the influence of seapower on history. Mahan's teachings revolutionized the navies of the world and he was lionized overseas but outside of the war college he was derided by his own Navy. Old-timers in the fleet snorted, "Teach the art of war! Well I'll be damned!" and argued that

a sailor's place was at sea not at school. Influential politicians agreed and Mahan's promotion to rear admiral occurred only when every captain who had served in the Civil War was boosted automatically.

Today, in recognition of his genius, the war college seeks to create an atmosphere in which modern Mahans may flourish. During their ten-month trial by scholarship, high-ranking Navy and Marine Corps students read, are lectured at and debated with by civilian and military experts and wind up destroying each other in mock battles all over the globe.

At the end of this shore duty the exhausted officers head back to the tranquillity of life at sea. That is, all but the Army and Air Force brass, the State Department officials and civilian scientists who are included in the student body. This cross-sectional representation is supposed to stimulate interservice cooperation and lessen the head-banging that has characterized "unification." Sometimes it also leads to a new respect for civilian strategists.

In a recent simulated battle, during which students commanded opposing task forces, a civilian physicist maneuvered ships and planes with the

aplomb of a Navy pro. An amazed four-striper watched the nonchalant performance.

"Mr. Behrens," said the captain, "I'm astonished at your grasp of the military art—you must have had a great deal of experience."

Behrens admitted modestly that he had served in the first world war.

"I thought so," said the captain. "Whereabouts?"

"In the Army," replied the physicist, "as a private."

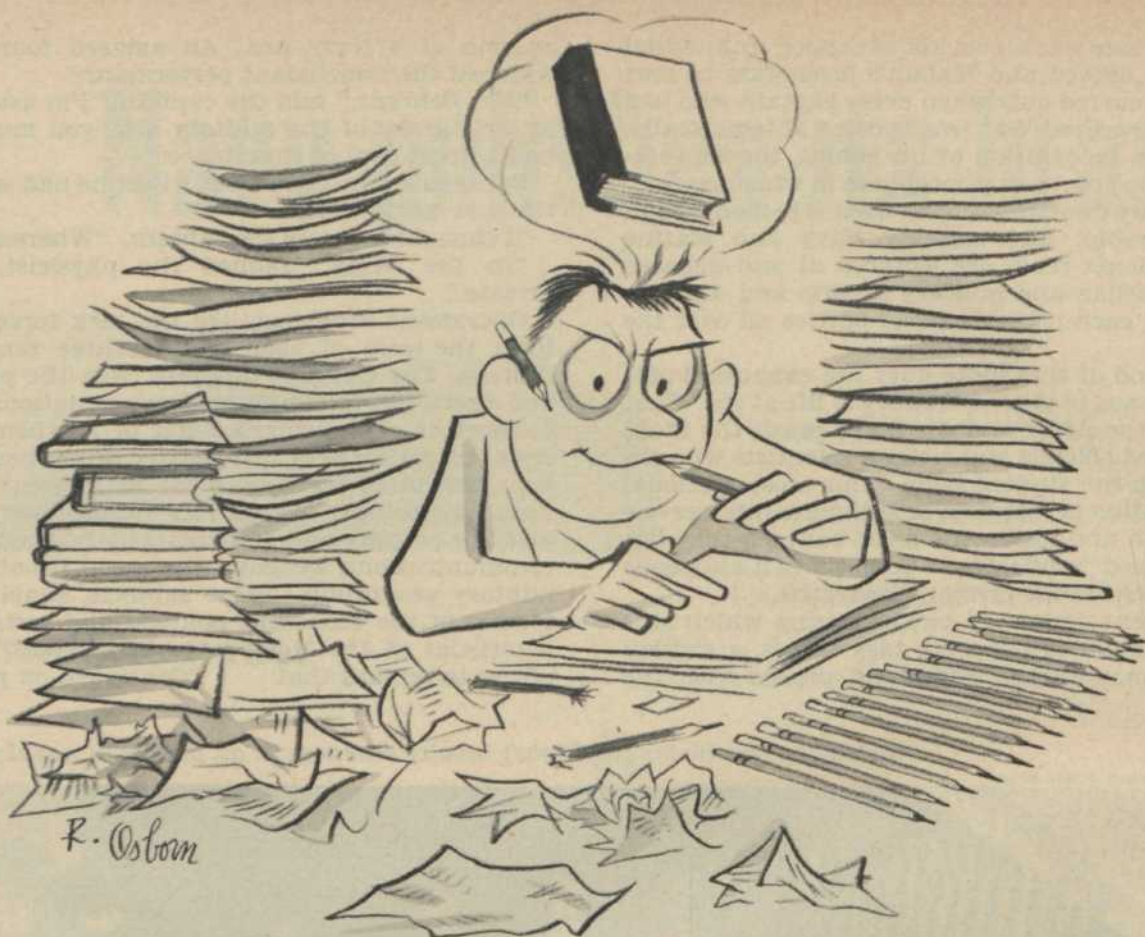
Operations Problems, like the task force battle, form the core of each of the three ten-month courses. The OpProbs progress from the planning and execution of simple military situations to the conduct of global war, a burst of mayhem which ends the school year. Integrated with these problems are intensive researches in strategy (long-range planning), tactics (the actual operations), logistics (supply and transportation), intelligence, communications, weapons, the world situation and military geography. These subjects, coupled with studies of the economic, political and social characteristics of the world's strategic areas led one officer to remark that

(Continued on page 58)

Operations Problems (OpProbs) involve research in all phases of naval warfare

PHOTOS KÖNER FROM BLACK STAR





ARE YOU *Your favorite author?*

*Every man, sooner or later, gets told "you ought to write a book."
Some take it seriously. Then trouble begins*

By LAURENCE GREENE

SO YOU want to write a book? Well, don't be so shamefaced about it. You have plenty of company. Somebody has estimated that there are 2,000,000 writers, aspiring or arrived, in these United States. The figure represents the *known* authors. How many lie beneath the surface, like the other eight ninths of the iceberg, is anybody's guess.

But if you *are* one of the X,000,000 people with the gleam in the eye, gird your loins and listen a little to find out precisely what is in store for you. When that book you want to do is written, and perhaps even published, the shards of your illusions will look like the inventory of the china shop after the bull passed through.

Before enumerating the horrors the beginning author faces, in as much of their entirety as space permits, consider the hypothetical case of a man we will call Mr. Average, and what happened to him when *he* wrote a book.

If his tortures had to be likened to a given thing in a single sentence, that sentence should read: "A first book hurts worse than the bastinado."

Now Mr. Average might have written in any one of a flock of fields. Books as a whole include fiction, biography (with which is lumped autobiography), texts, works on travel, *belles lettres* (fancy talk for airy nothings), the how-to's ("How to Queeve a Frammis With Tools You Make Yourself") and a host of others.

For the purposes of this dissertation, biography will serve as well as anything for the horrible example. There is only one example more horrible, in fact, and that is autobiography.

Whilst browsing through the Encyclopedia Britannica, hunting for information on what to feed his pet falcon, Mr. Average stumbles on a reference to one "Catfish" Cain. The condensed facts of Mr. Cain's life are fascinating: Beginning life as shill for a midwife in the Mississippi Delta country, he traveled far and he traveled wide. He served before the mast, photographed an authentic mermaid with a permanent wave, ran guns into Latin America, cornered the peanut oil market in 1917, thus losing the war for the Germans, and died at 98 after

founding the 100,000th religious cult in Southern California.

The more Mr. Average thinks about this bloke the more excited he gets. At first he does no more than ride a hobby. He digs up old books with references to the "Catfish," and considers his exploits in newspaper files long since turned saffron. At this stage he is like the man who has taken an antityphus injection: he has been bitten by a louse but the fever is not acute. For the moment the adventures of Mr. Cain do no more than whet the curiosity and put the red corpuscles in a jovial frame of mind.

But comes the day—and it comes, as inevitably as the man with the scythe and March 15.

An evil little maggot wearing horn-rimmed spectacles and a sneer starts walking around in Mr. Average's mind, muttering one question over and over again, loud enough to be overheard:

"Why'n'tcha write a book about this guy. . . . Why'n'tcha write a book . . .?"

And right there Mr. Average is a gone goose. He has about as much of a chance as the man in the split pants leg does, when the cell door opens and there they stand—the warden and the chaplain and the two guards.

What had been a hobby now becomes an obsession. Mr. Average makes himself a nuisance to librarians. He writes to old gaffers who knew "Catfish" Cain, receiving in reply scrawls apparently resulting from the union of a quill pen with an acute case of palsy. His den becomes a dumping ground for pounds of books, documents, newspapers, notes scrawled on whatever foolscap was available. The children are shushed by the loyal wife, whose devotion to Mr. Average's task is somewhat colored by the statement she heard once: "A Book-of-the-Month Club selection puts \$100,000 in the author's pocket." (And, thinks the little lady, mink on the author's wife's back.)

The children are too innocent not to feel proud. Little Jocelyn tells everybody within earshot, "My Daddy's a writer!" not knowing that she would advertise a man with better sense if she could boast, "My Daddy's a cutpurse."

At the end of about a year the maggot has become a boa constrictor with Stentor's voice and the kindness of a Soviet slave-labor camp commandant. Mr. Average, beginning to be a little haggard, starts the actual writing of "The Ninety Lives of 'Catfish' Cain."

In a month or so, the author gets up to speed. He writes furiously far into the night, dramatizing every action ever taken by his subject, dumping anecdotes into the narrative stream as a conservation man sows trout fingerlings. After a gestation period which may run into a couple of years, the book is finished—300 solid pages of typescript, a fine fat pile of accomplishment.

A writer of best sellers passes through East Truss, Ohio, where Mr. Average makes his home, and after the lecture our new author screws up the courage to mention his book. The lecturer, who has not encountered more than a hundred such hopefuls in the first month of his tour, advises that the manuscript be sent to an agent and names one.

Off it goes. Back comes a letter from the agent, saying the book is a "grand job" (it's always "grand," Lord knows why), and is being dispatched forthwith to Barabbas & Iscariot, one of the "biggest houses in the game."

Weeks go by. Mr. Average gets to know every bristle on the postman's unshaven chin, for he looks at it every morning,

(Continued on page 76)



WHY COMMUNITIES GAIN IN STATURE



Many chamber executives away from work next month may be found in St. Louis at the A.C.C.E. meeting

TO restore Western Europe as a productive economy and a formidable ally, the United States has poured out between \$25,- and \$30,-000,000,000 in food, machinery, raw materials, money and manpower in the past seven years. In all history no other nation has given so freely to others, has maintained such standards of international generosity. Though appreciative of the material benefits, intelligent Europeans wanted to learn how we could do it, what the hidden factor was.

So, shortly after the Marshall Plan became effective, from England, Belgium, France, Italy and the Scandinavian countries came groups of officials, employers, factory workers and farmers. They were called "productivity teams" and scores of them roamed the United States.

When they had sloughed away the special techniques, the mass marketing methods, the wealth of mines, forests and fields, what they found was an attitude—a point of view we ourselves have difficulty in naming. Some call it "free enterprise," others "The American Way," still others "competitive capitalism."

If it was hard to define, it was easy to see where it was. The atti-

tude that distinguishes this American way of doing and looking at things begins in the community. It is not at the federal, or even at the state level. It begins and flourishes in any community which is on top of its problems, which plans its own development, and where the individual citizen participates in making the community a good place to call home. To the extent that each one feels an obligation to make the community a good place for business, job and family, the special ingredient, the hidden factor in America, is in evidence.

The American community, however, does not just happen. To build good communities has become a profession.

This fall—Sept. 21 to 24—more than 500 community builders from across the nation will gather in St. Louis to attend the 38th annual conference of their professional organization—The American Chamber of Commerce Executives.

Every delegate will get a chance to take an active part and to receive the maximum benefits because the four-day session is being organized along the lines of a chamber of commerce business clinic.

Most sessions will feature questions and answers from the floor.

Behind the chamber executive and his emergence as a professional man stands his national organization, the American Chamber of Commerce Executives. At the time of its founding in 1914 A.C.C.E.'s membership—176—was open to anyone who had an interest in chamber work.

In 1949, A.C.C.E. became a restricted professional organization with a code of ethics as devoted as that of any other group in the country. The association acts as pace setter for its 1,400 members in establishing work standards and in keeping them rising.

Just as the qualifications and responsibilities of chamber executives have grown to meet the times, so have chambers of commerce. Once they were primarily promotion groups concerned with such activities as sales and marketing. However, early in this century businessmen came to realize the degree to which commerce and industry depend on sound community growth. At this point modern chambers began to evolve as constructive, hard-hitting, all-around organizations. Today they are backed by 1,500,000 individual business and professional men and corporations. Their interests and activities include: Education, local and national affairs, public health, recreation, taxes, payroll and controls—in fact, anything that affects the good of the community.

In such an across-the-board operation, the problems are varied and complex. Often the solutions can not be found at home but in a gathering such as the forthcoming meeting.

"A conference of any professional group," points out F. R. Henrekin, A.C.C.E. president and general manager of the Kankakee (Illinois) Chamber of Commerce, "means individual as well as professional progress. Our fall meeting will provide a common ground for chamber of commerce executives throughout the United States and Canada. Our progress will come from the pooling of our knowledge and experience, the exchange of ideas and information, the study of management and leadership techniques.

"The conference has behind it a record of 38 years of consecutive service to the chamber executive, his organization and his community. Business leaders recognize attendance of managers as a sound investment of chambers' time and funds."

If your chamber executive is out of town in September, you can expect big dividends on his return.

BIGGEST LITTLE BANK

THE uniformed messenger laid a large manila envelope on the desk, tucked a receipt in his pocket and strolled out of the big crowded room.

Behind the desk, a snowy-haired, friendly looking man in his 50's put on horned-rimmed glasses, nonchalantly broke the seal on the package and mused to himself: "Must be another batch from that colonel in Belgrade." He was right. The bulky envelope, which had traveled by diplomatic pouch across the Atlantic, contained exactly what was expected: a typewritten note, a U. S. Treasury check for \$600, a bank deposit slip—plus a half dozen unstamped letters addressed to various points in the United States. And would Mr. Christian kindly see that these were mailed as usual?

Mr. Christian is Waring L. Christian, who runs the Pentagon branch of the First and Merchants National Bank of Richmond, Va. The time was 1949 when Uncle Sam and Marshal Tito weren't on such friendly terms as today and communications out of Yugoslavia were not to be trusted.

Christian took the check and deposit slip behind the counter of what can appropriately be called the biggest little bank in the world.

For with only 34 employes the Pentagon money house handles some 5,000 customers in person almost every working day.

The latter are largely military people who became accustomed to banking there and continue to do so no matter where they go. With a potential of 32,000 clients, the bank cashes as much as \$500,000 worth of checks some days and makes many loans.

Nevertheless, Christian and his staff reserve time to take care of the "foreign" business such as the request from the colonel in Belgrade; or the sergeant in Afghanistan who recently opened an account by mail; or the five military attaches stationed in Moscow.

The bank was established Aug. 20, 1942, five months before the Pentagon was completed, and at the request of the War and Treasury Departments.

—ROBERT L. DUNNE

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Three-Ring Town in Texas

(Continued from page 25)

Gainesville was, of course, that no burlesque was ever held. Everybody became circus performers, and what they lacked in skill they quickly learned.

The problem—to get ahead of the story a little—is not performers, they will tell you. Every community is loaded with unsuspected, eager circus talent. The problem is management. Gainesville has bled and died for its circus all these years. Every year, they say, will surely be the last but one way or another, Gainesville has developed management along with acrobats.

The first circus May 1, 1930, cost \$300 and netted \$420, but business soon picked up. Ethel Livingstone, a lady acrobat "at liberty," wintered in Gainesville the next year and taught the girls and boys to hang by their teeth and tumble. George J. Carroll, the mortician, thought girl tumblers in gingham looked just awful, so he supplied silk and sequins. Whole families joined up: something for everybody to do at night, together, and no baby-sitting problem. Every small boy in town who could shinny up a tree put up a rig in his back yard and tried to break his neck.

Horsemen trained their mounts. Housewives stitched tights. And the bankers, with one eighth of the people in town, which would include almost all the able-bodied, industriously and happily working for the circus, recognized the enterprise for what it truly was—a community expression of good will and solidarity, fun and friend-making, and put up money when needed without grousing. The wise Gainesville businessmen, it turned out, invested in the most intangible commodity of all, human happiness, and were paid off with profits of millions of smiles.

Almost immediately the circus developed a star. Jerry Murrell (Mrs. Alex, wife of the engineer) could ride sensationally. On the high wire she was dauntless and graceful. Others were good, even sensational, after a few months' practice, but Jerry was the star. Her husband, Alex, worked the lighting, built a home-made calliope and superintended the rigging—with a proud heart in his mouth as Jerry whirled through the air 30 feet up.

The Murrells took in a high school boy, Vern Brewer, because he showed unusual talent with

animals. The Murrells acquired more horses, then ponies, then Vern bought four ponies of his own and trained them.

This ensemble met tragedy when Jerry suddenly fell ill and died. Alex Murrell sadly quit the circus of shining memory and proud, frightening moments. He and Vern batched it together for two years, Vern meanwhile going on with his horse training with Alex's help and advice.

And then, not long ago, without a ripple of talk in the town because it seemed so natural, Alex married Jerry's best friend, Gladys Fridell.

There is no more high-wire rigging for Alex and no more heart-stopping thrills as a pretty girl on a great white horse leaps through fire, but an adjustment has been made because Gladys Fridell is a wise woman. At her insistence, she and Alex became clowns, gorgeously grease-painted, trick clowns, working funny gadgets that Alex manufactures in his workshop. And there is a special



satisfaction because Vern, now grown and the owner of a thriving pony farm which ships Shetlands throughout the world, presides in the center ring, working eight horses.

Peggy O'Neal is the daughter of Leon F. O'Neal, cotton buyer and clown, mother of "Chuck" O'Neal, six-year-old clown, and wife of Charlie O'Neal, trapeze catcher and college student. Peggy, 25 years old, is a slim, delicately muscled, pretty girl who weighs 110 pounds, stands five-foot-three, and flies through the air like a

butterfly into her upside-down husband's hands.

The flying act—30 feet high, over a net—is composed of Donna Rogers, whose father is a policeman; Evelyn Kaps, who goes to college and clerks at the Ellen Shop, Billy Woods, whose father is a cafe cook, and the O'Neals. It is likely that they will accept some professional offers this year.

Peggy took to the air only two years ago. She told me with solemn sincerity that any girl who tried hard could become a trapeze artist. "It just isn't as difficult as it looks," Peggy said. "I learned, with a harness to break my falls, in two months. No accident—that is, except bruises. And I lost ten pounds."

Evelyn Kaps has been with the circus since she was four, has learned to do everything, from bareback riding to tightrope balancing stunts, and high flying. Strikingly handsome, she's had professional offers by the score, turns them all down. She's taking a business course.

Gainesville has never had a recognizable juvenile delinquency problem, but they point out a boy who got in trouble with the law. Let him and his act be nameless,

of course. He did his stretch and returned to his home town with his jaw out a country mile.

"Let me show the folks I'm all right," he said. "Let me at that circus. Let me speak to the other performers first and see if they'll have me."

They had him and he worked and his act is tops. Indeed, Clarence Leonard pointed out to me that Gainesville kids work so hard in their high school gymnasium and in the circus' own small training quarters that they hardly have time to

take a fling at delinquency. Moreover, this group activity leads into other things, has become the nucleus for Boy and Girl Scout troops and other good directional activities.

Last year, the circus played Garland, Abilene, Dallas, Childress, Carlsbad, Odessa, Amarillo and Fort Worth, will make its longest tour this year when it expands into Louisiana.

This is how they do it: they have \$75,000 worth of equipment now (including the new elephant), a \$10,000 big top, and they're out not

to make money but to have fun and not lose any. So they take no financial chances, charge a flat fee, usually \$5,000, for a sponsored performance. Sponsors are Kiwanis, Lions, Chambers of Commerce, Junior Leagues, Optimists, Variety Clubs, churches, which handle ticket sales and always have come out with a profit. They play many return engagements and could tour all summer if they had the time.

Actually, how the circus continues from year to year is a mystery even in Gainesville. It usually starts the season with a deficit of about \$13,000. In 1935, it just pulled through, after the performers came home breakfastless from Fort Worth. Last year, when Morton Smith, founder and moving spirit, fell ill, everybody decided to give up. Circus season came, the town got restless, and away they went. When the sawdust was spread and the band began to practice, Morton announced he was recovered.

This year, Frank Schmitz, the new president, walked the streets in gloom and lost sleep in nightmares and fog-shapes of bankruptcy and failure. One day he was sitting on a drugstore stool, having his morning coke. "Can't be done," Frank muttered. "We're through. But shucks, here we go again, let's do her!"

It's bigger and better than ever. It's so good that the Circus Fans of America held their national convention in Gainesville in May, attended in a body, yelled their heads off, and returned to the 28 states they represented to shout that the Gainesville Community Circus is the greatest show on earth. Before they left town they elected Morton Smith president of their national organization.

Chamber of Commerce committees have come to Gainesville from many cities to learn the magic of how Gainesville does it. Gainesville can't tell. My impression is that Gainesville would as soon lop off its 11,246 noses as kill the circus.

The answer to all this is, of course, that any other town could do it just the way Gainesville does it, by guess and by gosh, *if enough citizens wanted to do something together*. Gainesville has proved that talent can be found and developed anywhere there are bright, long-muscled young people. The key is finding management willing and able to take the pains and trouble to show everybody a swell time and in doing so weld the community with a warm bond of common interest.



Tutoring tuners by mail

THEY laughed when Niles Bryant said he could teach piano tuning by mail. That was 53 years ago in Michigan. Today, thousands of persons throughout the world have proved he was right.

Bryant has died, but his son, Niles, Jr., is carrying on with the Niles Bryant School of Piano Tuning and Technics, now located in Washington, D. C. He and his wife, Janet, mail out lessons, enroll new students and grade examination papers for hundreds of musicians, housewives and earnest young men each year.

Their course is recognized by the United States Office of Education, the Veterans Administration and many state rehabilitation services. Prison inmates enroll. So do piano owners who are sailing for places like Arabia and want to be sure of good care for their instruments.

"Anyone can learn to tune a piano," says Bryant. "It's a matter of acoustics, not music.

All you need is fair hearing."

Some of his best pupils are retired businessmen who want to keep occupied. Band leaders say it helps them in orchestration and improves their ear.

Bryant gives each pupil as much individual attention as possible. Pupils are welcome to write in with as many questions as they wish. Each one is answered individually by mail.

One lad in the hills of Tennessee got through the first four lessons without trouble. But when he received lesson five he wrote that he knew he couldn't do it because he had never read a book as big as that lesson.

Bryant told him to forget the book but just to follow the instructions that Bryant would give him once each week by letter. Within a few months the youth had gone through the lesson, a small part at a time, and he finished the remainder of the course without a hitch.

Bryant provides a complete set of piano tuning and repair instruments with his course. This includes a tonometer—an instrument patented by the elder Bryant to take the guesswork out of piano tuning. He still makes a portion of these instruments himself and the rest of the work is done in Battle Creek, Mich., where the school was founded in 1898.

Another instrument—this one loaned to the student—is a complete key action of a piano. The student tunes it and mails it back to the school. He is then graded for accuracy.

The piano trade estimates that there are 20,000,000 pianos in America today that need tuning or repairs. Bryant says that this represents a potential expenditure of \$20 for each instrument annually.

"So you can see there's plenty of room for expansion in our business."

Bryant, incidentally, neither tunes nor plays a piano at home. He doesn't even have one. The violin is his favorite.

—RAY WILSON

The Capitol's Capital Guides

(Continued from page 43)

spring vacation when parents and children swarm the Capitol, build up in the summer with graduating high school students and tourists and slope off in the fall with honeymooners. Two thousand a day is par for the summer.

In the winter months of December, January and February, business is so dull each guide works every other week.

Each tour is a 40-minute event that includes a scholarly lecture, a running fire of anecdotes and a peek at Congress transacting its business. The latter is the overwhelming favorite of the customers with the echoing trick in Statuary Hall second.

The guide stands at the exact spot where Adams fell and whispers a few words. The dumfounded party of 35 tourists across the hall hears each syllable.

A few weeks ago, an older tourist said excitedly, "I took this trip as a boy 50 years ago, and I remember this whispering across the hall just like it was yesterday."

For their labors the guides receive approximately \$5,000 a year, or an equal share in the receipts of the tour fees.

When a senator was informed of the fact the fees had not gone up since the service was started in 1876, he exclaimed, "By God, we ought to make Harry Nash (dean of the guides) Director of Economic Stabilization."

The guides rule themselves with a set of rules stricter than those for a girls' dormitory and have what amounts to a blackball over new members.

When a vacancy occurs among the 12 guides listed as senate appointees, the sergeant-at-arms selects the most highly recommended from the long list of pleaders. These are then paraded before the critical eyes of Nash, who regards the "Order of Guides" as several steps ahead of a Yale honor society.

He makes it plain to hopefuls by expressive raisings of the eyebrows and deft changes of tone that no one is really qualified unless he has a critical mastery of classical art, knows more about American history than a university prof, and can sway an audience like the old masters, Robert La Follette, Sr., and Henry Ashurst.

Nash tells of the time Senator Ashurst recited Hamlet's soliloquy

for him and sighs, "Beautiful, beautiful!"

When a guide is tentatively approved, he is tutored by the elders. A new guide explained, "The first day I reported on probation, I was loaded up with my weight in books to study, questioned on everything including the validity of my marriage license, and walked until I was ready to drop."

After the tutoring, usually four days, the hopeful begins an apprenticeship at half pay. He takes parties through under the stern eye of an elder. Harry Nash flunked his first test in 1915 when he lectured a group, "One hundred and eighty feet to the dome is the masterpiece of the Italian painter, Mister Brumidi."

There was a fierce fit of coughing from captain of the guides, Benjamin Cady, standing near. His eyebrows bristled. His eyes were great storms. He said in a loud and contemptuous whisper, "Not Mister Brumidi! Constantino!"

In the following month the weak sisters fall by the wayside, usually from the inability to handle people without calling for a cop or raising



the voice. I saw a sample of the art of making friends on a tour with Mrs. Queene Anderson, a white-haired matron with the poise of Queen Elizabeth. Two tired tots of an Army captain were whimpering.

"What's the trouble, dears?" she asked kindly.

"Tell us a story," the little boy cried. The little girl added, "Yes, the three bears."

Mrs. Anderson stooped down, put an arm around each and related the fairy story in a way that delighted even the adults.

Harry Nash remembers the large and friendly drunk who tried to yank him forcibly behind every statue in Statuary Hall for a drink. He declined gently but firmly, and, at the same time, continued the lecture.

Colonel Miller had a bad moment that put him to the test. He was telling a favorite story about the statue of Will Rogers.

"You will notice every statue but this is parallel to the wall. A few days before his death, this great American was walking through the Capitol with a friend who remarked, 'One day you, too, will be in the Capitol, and live forever.'"

"Will grinned and answered, 'If I'm ever that fortunate I want to face the House so I can keep my eyes on Congress.' As a result, Will's statue stands at a different angle from all the rest."

Miller added a postscript, "Will's son was here in Congress, and he was exactly like his father in every way, but one."

The guide dramatically pointed an index finger to his temple and looked at his audience for the delayed chuckles that usually follow. He stared full into the not amused face of ex-Rep. Will Rogers, Jr.

Without a stammer or loss of a syllable, the colonel concluded urbanely, "He has a more serious mentality."

All who survive these ordeals are colorful personalities in their own right. Colonel Miller pioneered a chautauqua circuit in Australia and Tasmania, was a Kentucky editor, the ghost writer of a successful book, and is now at work on his own popular text, "Know Your Constitution."

Nash, whose profile and manner of speaking are much like John Barrymore, is a stage-struck kid of 60 who was offered the curatorship of a theatrical museum a few years ago. Most of the theatrical folk who come to Washington look him up. Harold Lloyd told him a few months ago, "You've got a longer hit record than I have. When I first went through the Capitol with you, I was climbing up the side of buildings. You're even better now."

Red-haired Betty McKenzie is a slim, tempting young model who would rather lecture than pose. She wowed television viewers recently when she drifted before the cameras to bring customers to the La Boheme Ball. It was a sellout.

Queene Anderson was a schoolteacher, as are many of the guides, when she went on a tour 20 years ago and decided in the firm way of a woman that this was the job for her. Others among the guides are a congressman's assistant, a lawyer and onetime football hero, a Virginia aristocrat and a former professor who spends every spare minute boning up on Capitol lore.

The scholars among the honored 24 compete like court storytellers. They slip over to the Library of Congress and burrow among dusty tomes and yellowed news files for new, bright facts to enliven the lec-

tures—and inspire green envy. Colonel Miller has a story of every painting and statue in the Capitol.

One of these tales borrowed from ancient pages sets off his tour to a lively start. Before the statue of Abraham Lincoln by the 19-year-old sculptress, Vinnie Ream, he asks casually, "Any of you see anything odd?"

A bright-eyed tourist will reply, "What's that funny looking thing in Mr. Lincoln's hand?"

Colonel Miller replies in triumph, "You have found it! Abraham Lincoln was holding a scroll of marble representing the Emancipation Proclamation until Mark Twain visited the Capitol. The author remarked, 'That scroll looks like a dirty napkin Lincoln is staring at in disgust.'"

"The powers-that-be in the Capitol were so disturbed by this comment they ordered most of the scroll chiseled out of his hand."

Moving on to the great, sad head of Lincoln by Gutzon Borglum, without a left ear, Miller explains how the sculptor ran out of marble. The lecturer notes the inscription on the base of the statue, "Presented by Eugene Meyer, Jr.," and quotes the donor's impish statement, "If I had known it was that easy to get my name in the Capitol, I would have put down my address, too."

Every once in a while the sight-seers themselves make the stories. One of Harry Nash's favorite tales is about the Solomon Islands potentate, Chief Kata Ragosa. His big bare feet padded on the marble floor like slabs of ham.

Harry was trying to figure out what kind of pidgin English to use when the chief addressed him.

In a faultless Oxford accent, the chief said, "I say, I should like to see Brumidi's frescoed canopy I have read so much about."

Another time, Nash was a little uneasy about how to approach the famous Brumidi mural of a stern George Washington demanding surrender from Cornwallis at Yorktown, because Winston Churchill was in his group.

But Churchill spied it and said, "Let's look at it. It's Yorktown, isn't it?" He turned to Nash and remarked proudly, "You know I have some interest in the Capitol. My Mother was an American."

Actually, it is not Oxford-educated chiefs or visiting royalty which surprises the guides, but rather Joe Zilch from Kokomo.

Invariably at the end of the tour 2,250 footsteps from the beginning someone in the party will drawl, "Where does Congress meet?"

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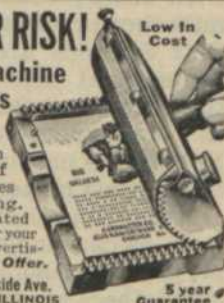
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I Make No Butts About It

(Continued from page 37)

ported from abroad. In recent years, they have increased until there are several hundred thousand in America today.

Largely, they are in the hands of people, like myself, who own farms too small to support a cow. The Department of Agriculture, for several years, has been doing research on goats at its experimental farm in Beltsville, Md., looking toward the development of a milk animal which will replace the cow on small southern farms.

Almost every large city has a number of small goat dairies which supply the need for this product. It doesn't require much space or equipment to keep a few goats and sometimes they show up in odd places. The editor of one of the dairy goat magazines discovered that a doctor was keeping a couple of goats in a garage across the street from the magazine office.

IN Washington, people living in one of the city's swankiest residential districts discovered that one of their neighbors was keeping a herd of goats and serving a nice little milk route. They protested and city authorities came to investigate. But, since the goats didn't seem to smell any worse nor make any more noise than people, the authorities couldn't figure out what to do. They finally told the man that he couldn't deliver milk in the city without a permit.

But they informed him, with something that looked very much like a broad wink, that there was nothing they could do about it if his customers called for milk at the door. So the man went on running his dairy on a cash and carry basis.

Lately, several large dairies have discovered that the demand for goat's milk in their area is great enough so that they maintain herds. Creameries and evaporated milk plants buy surplus goat's milk. One large company is now producing evaporated goat's milk, as well as the powdered variety.

Goat's milk sells at twice or more than the price of cow's milk. But pound for pound, the goat is rated as a more efficient milk producer than the cow. One cow will eat as much as six or eight goats will eat, and will seldom produce as much. The feed required to produce a quart of goat's milk costs around five cents. Commercial goat dairies figure that other expenses involved

in producing and marketing the product may run costs up another 20 cents or better.

Registered does—as the female goat is called—from any of the four recognized breeds popular in America may cost from \$50 to \$250 or more. Imported stock may cost more than \$500. Grade goats, which are cross breeds between the imported lines and the American scrub goat, may be cheaper. The four registered breeds in this country are: Toggenburg and Saanen, of Swiss origin; the Alpines, which may be of French or Swiss origin, and the Nubian, which came originally from the Near East and Africa.

We goat owners, being something of a scorned minority, are apt to be aggressive when discussing our animals. A number of radio commentators and comics have been taken aback by the volume and the vehemence of the mail they have received after casting some slur upon the goat. Most goat owners are violent partisans for the breed of goat they own.



Men who know goat owners best, therefore, are careful when discussing the different breeds, to maintain that no one is superior to the others. They will, however, cautiously give each breed credit for some small, special virtue.

The Alpines may be praised for their beauty and the quality of the milk they produce. It may be noted that Saanens are widely used in commercial goat dairies because they are consistent, big producers. Or they may compliment the Nubians as producers of milk with the highest butterfat content.

It happens that I am a Toggenburg owner and, of course, above prejudice. I bought Toggenburgs simply because they were the first goats I saw and I fell in love with these bearded ladies at first sight. They are brown goats, with uniform white face and tail markings and white stocking legs. Several Toggenburgs have set new world's records for production and it was

recently announced that last year's test record for production was set by a goat of this breed. I'd walk a mile for my brand—and often have, after they've broken through the fence.

Champion goats, on good days, can produce more than two gallons of milk. But this is the pace that kills and the record, for a ten-month lactation period, stands at something more than six quarts a day. Commercial goat dairymen keep does which produce four quarts a day, while the Department of Agriculture considers a two-quart doe adequate.

The goat is as gregarious as a salesman at a convention. A single goat is apt to be lonely and, in the absence of other goats, will get along happily with sheep. They enjoy the company of the right sort of people, will let down milk readily for those they like and hold back on those they don't like.

The animals seem to have a high level of intelligence and are especially adept at unlocking gates and seeking out weak spots in the fencing. On the loose, they can tell instantly which is your most highly prized fruit tree and they will eat the bark off that one first. They relish good pasture, but are also fond of browsing through brush.

They won't touch onions, but chew happily on such items as blackberry briars and poison ivy. I have seen goats attack a sapling tree in unison. Two or three will lean on it until it bends to the ground. The others will hold it while the leaves are eaten off. Then, as if by a signal, they will all jump off and allow the tree to spring up.

AT her first kidding, a doe will usually produce a single kid. But at successive kiddings, she may produce twins, triplets or even quads. Goat kids are perhaps the most delightful and interesting young animals in captivity. They are born with a full set of teeth and, a few minutes after they come into the world, will get up and wobble away. Within a day or two, they are frisking about, butting each other playfully and following their owners like puppies.

Male goats are called bucks and the advent of buck kids poses something of a problem for their owners. It is not hard to sell doe kids, but bucks are something of a drug on the market. A good sized herd will require only one or two sires and those who own only two or three goats seldom bother to keep a buck.

Surplus buck kids really should

be sent to the butcher. Goat meat—known as chevon—is highly regarded. It is often sold as lamb or mutton in communities where there is no regulation prohibiting this. But the kids become pets so quickly that the average goat owner—and I am about the most average goat owner there is—chokes up when it comes time to slaughter the kid.

ONE goat owner I know of has offered a solution which seems pretty likely. He names all of his buck kids Billy—being careful not to distinguish any one by calling it Bill, or Will or Billy the Second. Lumped together in this sort of anonymity, the little bucks are put in an enclosure adjoining the garden. If the fence isn't too high, the goats will soon jump the fence and eat vegetables. After this has been repeated a few times, the goat man reports that it is comparatively easy to bundle a collection of pests, all called Billy, off to the butcher.

Goats generally breed only between the months of September and March. The gestation period is five months and they should give milk for ten months after kidding. But production falls off toward the end of the period and it requires careful planning to insure a year-round supply from a goat herd.

At the Agriculture Department's Beltsville experimental station, scientists have tested a theory that goats' breeding habits might be affected by the difference in the length of the days in summer and winter. So they established a sort of night club atmosphere for some of the goats and kept them penned up in dimly lit barns so that they enjoyed no more daylight in summer than in winter. Thus it became possible to promote breeding during warm weather.

So far, no goat owner has trained a herd of entertainers to start out on a tour of goat night clubs. But, in their efforts to rebutt—you should pardon the expression—the unkind things that are said about goats, they have gone to great lengths to develop every other conceivable use for goat's milk.

Goat owners enthusiastically develop new recipes, employing goat's milk and chevon; swap ideas on butter, cheese and ice cream making. That the horizons for the enterprising goat dairyman may, indeed, be unlimited would seem to be indicated by a piece of news which has recently come up from Florida. Down there, someone is marketing yoghurt made from goat's milk. Use it as a face cream, they do.

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Keeping baseball's books is a vital part of the game

EVERY week during the baseball season a mild, scholarly looking man named Fred Howe sits down with his aides at the Howe News Bureau in Chicago and methodically juggles some 150,000 figures. And every week those figures are examined by millions of eyes more skeptical than a bank examiner's—those of the baseball fans of the nation.

Were he endowed with a sort of mathematical mysticism, the most exacting of those fans would find less than one mistake in every 1,000 figures. And, if he were to analyze the huge jumble of batting averages, pitching records, and fielding performances after they've been subjected to a searching postseason scouring, he'd find them as free from taint as a baby's conscience.

Thirty years ago, the routine postseason check of the Howe News Bureau ignited one of the most heated hot-stove controversies in the history of baseball. At the end of the 1922 campaign John Phillips, now chief assistant to Howe, discovered that the bureau's statistics gave Ty Cobb of the Detroit Tigers a final batting average of .399. The Associated Press, on the other hand, carried a final figure of .400 for Cobb. While the American League batting championship was not at stake—George Sisler batted .420 for the St. Louis Browns that season—the AP statistics gave Cobb his third season batting average of .400 or over and a league record.

Painstakingly checking the box score for every Tiger game, Phillips finally discovered a discrepancy. In a game between the Tigers and the New York Yankees, the AP had credited Cobb with a hit on a play on which official scorer John Kieran, then a reporter for a New York newspaper, charged an error against the Yankee player. Phillips turned over his information to Ban Johnson, then president of the American League. To the frenetic trumpeting of blaring headlines, Johnson conducted an investigation which was climaxed by the reversal of Kieran's decision and the indignant resignation of the subsequent "Information, Please" pundit.

Ironically, ten years later Kieran confessed that he hadn't even seen the disputed play. He'd left the

press box momentarily and, upon returning, took the word of a fellow sports writer—who had no great love for Cobb—that the Tiger spark plug had reached base on an error. Cobb himself displayed his customary disdain for off-the-field disputes. "Hell!" he growled. "I get my hits on the field, not in the press box!"

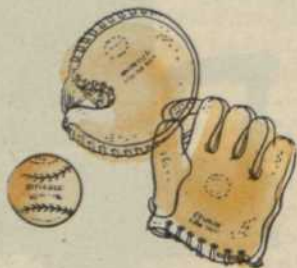
Hardly known outside of the inner closets of baseball, the statistical bureaus have become as much a part of the game as the players themselves. Without these bureaus, the intricate web of records, which form an integral part of baseball, would never have been spun. Without them, major league managers and magnates would have no statistical basis on which to judge the talents of their minor league farm hands. Without them, sports writers frequently would find themselves literary cripples, and fans would be shorn of much of their ammunition for the countless arguments which never seem to be settled.

Accuracy has been the cornerstone of the success of baseball's statistical bureaus. Of the 17 bureaus which functioned at the start of last season, the Howe News Bureau was by far the largest. Because of its reputation for uncompromising accuracy, it was designated last year to process the statistics for almost two thirds of the leagues in organized baseball—32 circuits ranging from 13 class D minor leagues to two girls' baseball leagues to the American League. Somewhat smaller but nonetheless accurate is the Al Munroe Elias Baseball Bureau, official statistician for the National League and three other circuits.

Neither the Elias nor the Howe bureaus rely entirely on the leagues for their income. Both syndicate weekly bulletins of batting and pitching records—the Howe office to more than 65 newspapers, radio and television stations, and baseball executives, and the Elias bureau to more than 20 clients in the same fields. In addition the Elias Baseball Bureau publishes the "Little Red Book of Baseball," whose detailed list of records from 1876 to date make it the most valuable crutch of baseball writers.

Into the five-room suite of the

Behind the box score



By WILLIAM FURLONG

Howe bureau in a Chicago skyscraper—and also into a branch office in Atlanta—pour the box scores of as many as 250 games a day. The processing of this flood of statistics is still accomplished almost entirely by hand.

As each score sheet is received, it is checked against the box score of the Associated Press and the performance of each player is posted to an individual work sheet. Instead of burdening his 20-man staff with the task of calculating the batting averages for some 13,000 ballplayers every week, Howe has accumulated a half-dozen sets of two-volume, handwritten tables which list the batting average for every conceivable combination of hits and at bats up to 235 hits and 599 times at bat.

When the neat rows of batting performances have been totaled, each statistician merely refers to one of the tables to find the correct batting averages. By the middle of

"If you want to raise a crop for one year, plant corn. If you want to raise a crop for decades, plant trees. If you want to raise a crop for centuries, raise men. If you want to plant a crop for eternities, raise democracies."

—Carl A. Schenck

each week, the ever-mounting mass of statistics has been molded into trim lists of batting and pitching records and are spewing from the mimeograph machines for publication in the newspapers of Saturday afternoon and Sunday morning.

When the season ends, the 52-year-old Howe steers the operations of the bureau into two channels. One is the compiling of football and basketball statistics for the Big Ten. The other is the application of a mathematical antiseptic which purges the huge bulk of baseball statistics—which reaches a staggering total of 3,000,000 in a season—of the most minute errors which creep into the weekly bulletins.

Not only is every figure checked against the original record but each statistician automatically scans the myriad of checks which mill about within the structure of the statistics themselves—the number of put-outs, for instance, must always equal three times the number of innings played. It takes as much as a month to check the American League statistics alone

and not until the end of the year has every figure for every league been checked and okayed.

"Most of the mistakes that we find can be traced back to the official scorer," says Howe. Surprisingly, he finds the minor league scorers more reliable and more competent, as a whole, than the major league variety. And the statistics, he feels, are only as good as the men who report them. The official scorers invariably are newspapermen who are paid anywhere from \$2 to \$20 a game by the league for sitting in as official arbiter on all scoring decisions.

In addition, the official scorer must fill out a report of the game on a score sheet some 21 inches long which contains almost 800 blanks—rarely are more than 200 filled—yawning for every bit of data from the starting line-up to the condition of the playing field.

When they spot an error, few players complain directly to the bureau; most prefer to route their grievances through their favorite sports writer. It is the relief pitchers who register the most frequent complaints—and their gripes inevitably are matters for the official scorer rather than the official statistician.

"I don't want to take the credit away from anybody else," is their universal chorus, "but I really thought I deserved credit for the win." The Howe bureau patiently advises them to contact the official scorer but the players seldom follow up.

Never in the memory of Phillips or Howe have any of the recognized greats of the American League registered a complaint with the bureau. Nevertheless, the bureau unhesitatingly will check every complaint, even if it is filed by a utility infielder in the Tobacco State League. "Usually we find that the boys are wrong," says Phillips, "but we always give them the benefit of the doubt."

The fans are considerably less reticent about registering complaints than the players. Whenever they feel a favorite has been slighted, they bombard the league offices as well as the bureau offices with notes hinting that the statisticians wouldn't recognize a baseball game if they saw one. (Fred Howe sees about 40 every year.)

The statisticians accept such epistles with an air of amused tolerance. "We wouldn't be in business if it weren't for the fans," says Fred Howe, "but I haven't met the fan yet—or the player either, for that matter—who complained of an error in his favor."



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Navy Polishes Its Brass

(Continued from page 45)

"taking a course at the Naval War College is like drinking from a firehose."

Fortunately, only firehose drinkers are selected as students. In the process of picking 100 men for *Command and Staff*, the college's junior course, service records of more than 10,000 lieutenant commanders and commanders are examined. Graduating officers usually are assigned to staff duty afloat with increased responsibilities. Outstanding service will enable many of them to return to the war college for one of the two senior courses, *Strategy and Tactics* or *Strategy and Logistics*. Although the emphasis is different, with the logistics men saying you can fuel some of the destroyers some of the time, both courses are of mammoth scope in preparing officers for high command.

GRADUATES of the senior courses may become members of a unified staff with Army or Air Force or of a joint staff with our NATO allies. With increasing numbers of war college alumni in these high posts there is considerable competition for selection to its classes. As a result the qualifications of those who are accepted—Navy commanders and captains, Marine Corps lieutenant colonels and colonels and their Army and Air Force counterparts—would make Frank Merriwell envious. To put it briefly, the saying is that anyone lost at sea can locate Newport when the sun glints on its gold braid and Navy Crosses.

Somehow the Navy has located enough brains and braid to make up an equally gifted faculty. The resulting staff-student relationship is typical of neither military schools nor civilian colleges. There is no competition, no grading, no restriction on unconventional thinking, no concern with differences in rank and most heretical of all, *no absolute solution* to anything. Students are told that they are getting "a solution, not the solution." In this atmosphere creative thinking flourishes and any stereotype of the military mind gets a quick kick in the left flank.

A recent Operations Problem illustrates the thoroughness of projects. The fictitious military situation concerned the Middle East area which had been overrun by a mythical enemy designated as

Purple. In initiating the attack Purple swept through the region, gobbling up its great oil fields. Meanwhile friendly Blue forces and their allies were building up for its recapture. Students were formed into opposing staffs for the clash.

TWO months of faculty preparation preceded the exercises. The college's intelligence department supplied each student with a hefty strategic study of the Middle East based on latest information. Then Capt. William J. Dimitrijevic, an expert on strategic intelligence, lectured on the area's terrain, climate (165 degrees temperature in the summer), possible invasion beaches, resources and population.

In the playing out of the problem, the Purple leader, Comdr.



"I'm all set. I have a flashlight and K rations and I told my mother to leave the front door latch off"

Jesse B. Burks and the Blue commander, Marine Corps Col. George F. Britt, had separate headquarters in the war college. Telephone circuits linked them to their subordinate officers and to a neutral staff which translated their orders into troop, plane and ship movements on the floor of the college's maneuver room.

During the exercise, umpires assessed battle damage by intricate calculations based on World War II and latest Korean experiences.

Thus when Purple launched a strike against a Blue airfield, the location and range of the defending radar, the condition of readiness and number of fighter planes at the Blue field and the speed, bomb load and range of the attacking aircraft enabled umpires to assess the effectiveness of the raid.

In the Middle East problem, the Purple commander who had launched the war developed a crafty defense against the relentless Blue build-up. Since his Navy was weak except for submarines he concentrated his snorkels against oilers carrying jet aircraft fuel from North and South America. He also equipped native fishing dhows with radio transmitters to be used for intelligence purposes. As an added menace he lashed torpedoes to them for possible surprise attack against Blue surface craft.

Then, locating sizable forces of Blue troops at an advanced base, he launched an atomic attack which caused severe casualties but could not prevent Blue's D-Day invasion. This was a small part of the operation which consumed weeks of student preparation and 15 days of actual maneuvering.

By 1954 Operations Problems at the war college will be played out on a \$400,000 electronic command trainer which will picture fleets, planes, submarines, torpedoes, rockets and guided missiles in action. Opposing student commanders will control the movements of their forces and battle damage will be assessed instantaneously by an automatic computer. The electronic brain will track speeds up to 3,000 miles-an-hour and new weapons and techniques can be introduced to prevent the machine from becoming obsolete.

THE research that precedes the playing of Operations Problems provides up-to-the-minute information about areas vital to U. S. interest and the instant command decisions during maneuvers are invaluable mental training. This view is echoed by a quartet of students who are Korean "old grads," Capt. John E. Fradd, who commanded the Navy attack transport *Henrico*; Comdr. Edward Carlson, skipper of the destroyer *Lind*; Lt. Col. J. F. Cole, commanding officer of a Marine Corsair squadron and Col. William Bartlett, an Army tanker.

Sitting in one of the quiet student offices overlooking Narragansett Bay, Captain Fradd, a small, mustached man, recalled an earlier crossing of their paths.

"I carried Bartlett's tank bat-

talion to the Wonsan landings on the *Henrico*. Before the tanks landed Carlson's destroyer bombarded shore installations and, once the troops were ashore, Cole's Marine Corsairs gave them air support. Then when the Chinese jumped in and the retreat began, Cole's planes supported the withdrawal from the reservoir, Carlson's destroyer fired 12,000 rounds during the evacuation of Hungnam and sure enough the *Henrico* salvaged Bartlett and his tanks. Incidentally, the Commies weren't very far away and Bartlett promised he'd buy me a drink back in the States—still hasn't paid up."

Bartlett, standing nearby, promised he would.

THE war college routine is hardly a rest cure for officers returned from sea duty. Take a day in the college life of Captain Fradd, late of the *Henrico*.

Like most students Fradd lives in Newport. On a recent, typical day he rose at 7 a.m., said good-bye to his wife and children before 8, and was in his office by 8:15. After a ten-minute bull session with his roommates (several students are assigned to each office, shifting at midyear to get diverse viewpoints), Fradd went to work on a report. As chairman of a group studying the strategy of a weaker naval force, he had to put himself in the position of, say, a Russian admiral, planning to make the most use of inadequate seapower.

In preparing his report Captain Fradd had the use of the war college library, whose 100,000 volumes comprise the greatest naval collection in the world. He also had access to the highly classified material of the intelligence department.

After working on the report until 10:45, he went to the spacious auditorium of Pringle Hall for the morning lecture. War College speakers include such top civilian and military figures as Bernard Baruch; Allen Dulles of the Central Intelligence Agency; former Ambassador to Russia Alan Kirk; Ernest K. Lindley; Adm. William Fechteler, Chief of Naval Operations and others.

On this particular day the lecturer was Dr. Bernard Brodie, former Yale professor and authority on naval strategy.

Dr. Brodie, a man of wit and erudition, worked over his subject with a sharp scalpel, excising what he considered the blunders of the Battle of Leyte Gulf. His criticism of Fleet Admiral William Halsey's tactics caused considerable seat-

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squirming and was a vivid test of freedom of speech.

The speaker likened the characteristics of sound strategy to those of wooing a maid, naming among other things, mobility, force, a clear objective, economy of means—and deception. He told Captain Fradd and his colleagues that military axioms and slogans are dangerous and “act as a substitute for thinking.” “Freedom from the dominance of slogans,” exhorted Dr. Brodie, “I would offer that as the fifth freedom.”

AFTER the prepared talk there was a question-and-answer period during which the audience took the offensive. There were no serious casualties.

At 12:45, Captain Fradd snatched a quick lunch at the officer's mess (cafeteria-style in spite of the glittering brass), then went back to the library for more study before an afternoon seminar with Dr. Brodie. At 4:30, the captain headed home with a pile of books for another night of study.

Some evenings he works in the library but most nights he averages two hours of study at home. This lengthens into frequent all-night and all-week-end sessions during preparation of the two required theses. With his *Strategy and Logistics* classmates, Fradd wrote his first on the subject, “A Comparison of the War Potentials of the U.S. and the U.S.S.R.”

At the same time *Strategy and Tactics* students were writing on “The Foreign Policies of the U.S. and the U.S.S.R.” Averaging more than 16,000 words these papers are done in an officer's spare time. To top off the year, both senior classes prepare a second thesis on the conduct of global war.

Some of the best work at the war college has been done by Army officers who have included Lt. Gen. Walter Krueger who commanded the Sixth Army in World War II and Gen. Edward M. Almond whose Tenth Corps made the dramatic Inchon landing in Korea to split the Red forces.

Although Army students invariably leave the college with a warmer feeling for the Navy, they do have some problems. There was the first lecture delivered by Col. Feodor Schmidt, senior Army adviser at the college.

“To me everything was a boat,” recalls the colonel, “so every time I said ‘boats’ during my talk, the audience yelled back, ‘ships, ships.’ Now I know the difference.”

Both staff and students bring an incredible diversity of world-wide

experiences to the college. Take a student like Comdr. Reginald Rambo of the Navy's Medical Corps. His qualifications include an M.D. from Harvard Medical School, a law degree from George Washington University and the study of atomic, bacteriologic and chemical warfare at another institution. During the war he had a share in planning medical phases of the invasions of Sicily and southern France. After graduation from the war college he will become assistant fleet surgeon on the staff of the Commander-in-Chief, Pacific Fleet.

On the staff side there are personalities like Comdr. Draper Kauffman of the *Strategy and Tactics* Department. Lean and professorial, Kauffman was forced to leave the Navy because of poor eyesight but in 1940 he raised \$3,400 to equip a French army ambulance, took it overseas and drove it during the months of retreat, winning a Croix de Guerre for heroism.

After a brief intermission in a German prison camp, he joined the

“Sound money is the backbone of a strong nation. A sure road to demoralization and despair is the steady depreciation of a nation's currency and the disappearance of the material benefits of sound money. Putting more money in circulation by financing the defense program through deficits would endanger the very foundation of our welfare and security.”

—William H. Ruffin

British navy and soon became England's ace bomb disposal officer, dearming unexploded Nazi missiles. With this evidence of useful eyesight Kauffman reentered the U. S. Navy, winning a Navy Cross for bomb disposal work at Pearl Harbor. Then he took time off to develop a new specialty—underwater demolition. He led teams of frogmen into the beaches of Saipan, Tinian and Iwo Jima, earning another Navy Cross and a Legion of Merit.

AFTER the war Kauffman gravitated to atomic matters and was a radiological safety officer at the Bikini test. This involved taking a small boat into the lagoon to check radioactivity immediately after the blast.

Men like doctor-lawyer Rambo and the mild Commander Kauffman are mere samples of the talent

that abounds at the college. On hand also are experts in the guided missiles “wonder weapons” and all students develop full appreciation of their potentialities in event of future conflicts.

Vice Adm. Richard L. Conolly, president of the Naval War College, is widely regarded as one of the Navy's ablest officers. A daring, resourceful commander at sea, his peacetime exploits in heading U. S. naval forces in Europe during a tense period were of equal significance.

“When I was a young officer,” he says, “I had a very narrow picture of naval warfare—my student days at this college were a revelation to me. With the Navy becoming more and more specialized, the war college correlates a vast amount of knowledge so that an officer can see the whole picture.”

Admiral Conolly's achievements in Europe won the respect of nations that are now our North Atlantic Treaty allies. The recent week-long visit to the college by naval attaches of France, Great Britain, the Netherlands, Norway, Greece, Denmark, Portugal, Turkey and Italy symbolizes this deepening relationship between this country and our allies abroad.

ONE of the admiral's principal contributions to the college has been the launching of an advanced course in strategy and seapower. Pioneering in this one to three year program, a rear admiral, four captains and a Marine Corps colonel are striving to develop a modern equivalent to Mahan's studies in seapower. As one of them put it, “Our Navy has become so proficient technically that we sometimes forget the ‘why.’” It is hoped that in discovering the “why” the experimenters will not run into the opposition that almost thwarted Mahan.

In his 1923 war college thesis, a commander named Chester W. Nimitz predicted, “Until war can be abolished and nations live peacefully with each other, force and right will jointly rule the world: force, until right is strong enough.”

Seventy years before the Nimitz statement the New York *Tribune* published a letter by Karl Marx which said, “The Russian bear is certainly capable of anything, as long as he knows that the other animals he has to deal with are capable of nothing.”

Unfortunately for current followers of Marx, the other animals, thriving in places like the U. S. Naval War College, are growing more capable every day.

TRUCK JOBBERS OF DIXIE



Old-time peddlers with their horse-drawn wagons are gone, but the modern version is going strong

THE AGE-OLD peddler hawking his wares down the byroads of the country is still going strong in Dixie in the guise of the modern-day "truck jobber," a figure that has become increasingly important to the distribution of nationally advertised products.

From the factory production line to the shelves of the country store lies one route not reached by the truck lines and rail express. The men who take up the final phase of distribution to these rural areas are known in the South as truck jobbers.

Usually located far from the metropolitan areas in the small towns and farm communities, these men remain uniquely local in thought and attitude, yet closely tied to the economic pulse of the nation through the salesmen who—representing one or more factories—sell them their wares.

Having no employees or boss but himself, the successful truck jobber is a hard taskmaster. Beginning at five a.m. his day is a long one. He calls on general stores, hardware stores, drug-stores; in fact any type of retailer he can supply. The merchandise on his one and a half ton truck is varied according to his desire and ability to sell. In the summer it's apt to be baseball caps, DDT, sunglasses, ice picks and hard candy. In the fall it's likely to be wool caps, gloves, drugs, footballs, socks and chocolates.

At the end of his 12- to 16-hour day he pulls his truck into his

combination garage and stock room at the rear of his house. There he is likely to meet a salesman who has been awaiting his return.

He takes this opportunity to replenish his stock—valued usually from \$5,000 to \$20,000. His average markup will be 20 per cent and he will turn his stock two to three times a year. Operating expenses will run about seven per cent, more if he rents warehouse space. A part of this expense is represented by license fees charged by the various towns he works in, and a large part goes toward truck maintenance. Almost without exception his sales are for cash.

Not all of this business is carried on by the one truck operator. Sometimes two, or as many as eight trucks operate from one warehouse.

Some of the more enterprising jobbers have got the business down to a finer point, hiring salesmen who take orders for later deliveries. Accounts for this type of business are usually carried on a week-to-week basis with the added expense said to be justified by the 20 per cent gross margin.

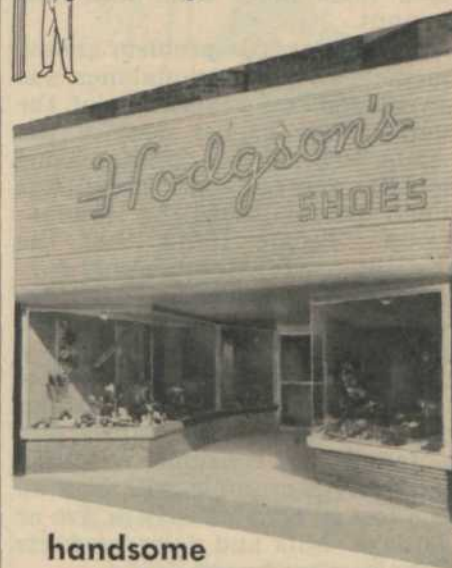
Since the founding of this country the truck jobbers' counterparts have loaded their horse-drawn wagons with pots and pans, silks and laces, and, with the present decentralization of industry and the movement of the population to suburban areas, their future looks brighter than ever.

—ROB AND MARGARET MABRY

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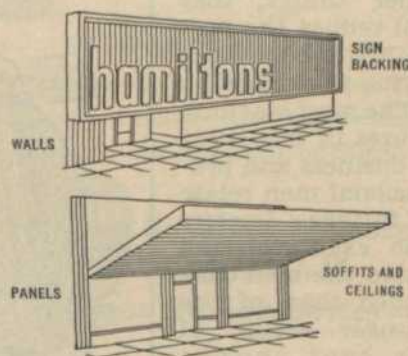
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Is Your Wife Starving Alone—or With You?

(Continued from page 31)

perts—and women in the same economic and social class averaged little more than half this amount.

Another serious problem among business and professional men was revealed in mineralization of the bones. Only 25 per cent of the combined group had optimum bone density, and the older group was much poorer than the younger group. "People think that the skeleton needs attention only during the growing period," says Dr. Mack. "They suppose that after maturity it remains static, like a concrete bridge. This is not true. Mineral material passes into and out of the skeleton constantly, and a failure to consume adequate calcium, for example, will show up as a loss in bone density in five or six days. Milk and dairy products—the best sources of calcium and many other nutrients—should be retained in the diet throughout life. Among other things, they will reduce the possibility of bone fracturing in old age."

The most startling figures in this study of business and professional men relate to fatigue. Doctors who examined and tested the men concluded that, of the younger group, 44 per cent showed moderate fatigue symptoms while 24 per cent showed severe fatigue reactions. In the older group only 30 per cent were in the moderate fatigue class, but 42 per cent showed severe fatigue symptoms!

"This is a cumulative result of over-all eating habits which do not supply the body with its requirements," says Dr. Mack. "It comes from a total pattern of poor nutrition. Plenty of milk, meat, eggs, fruits and vegetables could completely change this picture."

During the tests of these business and professional men, Dr. Mack says, "I learned a lot about businessmen's eating habits. Some of them attend so many banquets and organization dinners where food is often overcooked and too high in energy, that their whole nutritional balance is upset. Others

do so much entertaining of buyers that they seldom eat right themselves.

"The worst case among business and professional men whom I interviewed was a poor fellow whose physical and nervous condition showed serious deficiencies. He said he was starving because his wife was on a severe reducing diet and cooked only for herself. He had tried 'bootlegging,' as he called it, some decent food into the house but each time he wound up in a terrible wrangle with his wife. He said that ever since she had gone on her reducing diet she had developed the disposition of a cobra and wouldn't allow him a moment's peace, let alone the proper things for a man to eat."

When the Pennsylvania mass studies began in 1935, many persons felt that they would never



succeed because it was believed people of various economic and social groups would not cooperate. However, the opposite proved true and there has always been a waiting list of persons who want to be tested.

ONE of the first studies carried out under sponsorship of the Pennsylvania Department of Health was made in a rural "squatters' colony" in central Pennsylvania during the depression. Impoverished, ignorant, backward, these people lived in shacks assembled from old crates, tarpaper, and sheet iron. Living standards were nonexistent. Disease was commonplace. Studying their eating habits, Dr. Mack soon found herself involved in matters

that had nothing to do with nutrition.

One sweltering day she heard groans emanating from a tin-covered shack. Entering this hot-box, she discovered an emaciated woman in labor. Pulling her to her feet, Dr. Mack took her to a hospital, then returned and made provisions for the woman's sick husband and children. Gradually she became a kind of godmother to the whole colony. She settled husband-wife fights, gave advice on gardening and cooking and many other problems, helped raise bail for one nutrition subject who had been arrested, begged for clothing for them in nearby towns, and raised money for a funeral.

BUT she got her data. Some of these people are still regularly tested by Dr. Mack and her staff, producing a 17-year continuous nutritional record. An important scientific achievement, it reveals that advances can be made in overcoming the scars of malnutrition during a child's early days.

"Many of the ills of middle and later life are attributable to faulty nutrition during childhood," says Dr. Mack. "As a nation our medical costs—the highest in the world—could be cut in half if we'd learn to eat properly."

Education, rather than income, determines how well a family eats, the Pennsylvania studies show. This was first discovered in the squatters' colony study 17 years ago and all later experiments have verified it. When some adult in the family has received instruction in nutrition, either in school or through some women's club, foods are more wisely chosen and better prepared.

A severely reduced food intake and failure to get a balanced diet is blamed by Dr. Mack for the semi-starved condition of many wives. "The movies, fashion ads and styles, which extol slenderness as the basis of beauty, create an enormous pressure on women. Many of them have told us," says Dr. Mack, "that they are afraid of losing their husbands if they don't diet. Dieting may make them slender, but the fatigue and poor health that accompany dieting will hardly make them attractive. If men are interested in women without vitality, it is news to me."

The best-fed members of every family are babies. However, even in this group, there are significant faults. City children, studies show, are more likely to be fed milk and cod liver oil, rich in Vitamin D, in their infancy. This gets their bones

and teeth off to a good start. But frequently they are kept on soft baby foods too long when they should be getting meat, eggs, vegetables and a variety of fresh fruits. Farm children, on the other hand, start eating with the family earlier and therefore are apt to get these items. However, often they have not had cod liver oil, and their bone development lags.

America's worst eating habit, says Dr. Mack, is that of skipping breakfast or merely grabbing a cup of coffee and a bun. In a separate study of 5,000 persons' breakfasts, Dr. Mack and Dr. Charles Urbach, a colleague, found that either no breakfast or a useless one was eaten one quarter of the time. City families were especially bad, but small town families of medium incomes were the worst offenders. More than 30 per cent of them skipped breakfast altogether.

"No wonder these people are tired, get sick easily, and are always complaining," says Dr. Mack. "Here they've just gotten up from their longest fast—a night's sleep,



and then they swallow a thimble of juice and a cup of coffee and think they are ready for a day's work. Actually, they can't do a day's work. Breakfast should be a third of the day's food." White-collar workers have very bad nutrition records, the Pennsylvania studies reveal. "As they get older," Dr. Mack predicts, "they will reap a harvest of fatigue, irritability, headaches, frequent colds, and bad teeth as a result of their bad diet."

DR. MACK'S picture of America's nutritional status would be completely gloomy if it were not for the fact that she's discovered through "longitudinal" tests that it is possible for people to change both their eating habits and physical condition. In these longitudinal studies the participants were tested initially, then given a prescribed diet, then tested again to determine whether improvement had been registered. The middle-income, well educated Philadelphia families described earlier took part in such a test which was financed by Westinghouse Electric.

The families were tested at the start of the experiment, again at

six months, and again at the end of the year. As related earlier, children less than six were found to be the best fed; then boys from 12 to 18 years; then the adult males. The girls between 12 and 18 years were undernourished. Last place went to the nearly starving wives.

Foods were prescribed to overcome these deficiencies. Mrs. Julia Kiene, director of the Westinghouse Home Economics Institute, worked with housewives to show them how to plan, cook and shop with the least effort.

THE results, one year later, astonished both the participants and those in charge of the study, Dr. Mack says. Men and women, formerly dogged with fatigue, had thrown off this feeling like an old cloak. Teen-age girls had acquired better skin textures, better bones, glossier hair, and more energy. Even the younger children, originally the best fed, had made impressive advances. The rate of tooth decay declined for nearly everyone.

Mothers not only made great physical improvements, but by better planning and cooking, they spent less time in cooking and shopping. On a dollar basis each family was getting more for its money. The medical rating of whole families improved and doctor's bills declined. The biggest single change in the eating habits of these people was simple yet important—a wholesome, nourishing breakfast.

Similar results were obtained in another longitudinal study conducted in Lower Yoder township, a part of Johnstown, Pa. There the physical condition of an entire town was improved. "These longitudinal studies show what can be done with proper eating," says Dr. Mack. "Simple nutritional education can improve the physical well-being and increase the happiness of the entire country."

Dr. Mack plans to continue her nutrition studies at the Texas State College for Women where she has already begun a large-scale program of basic scientific research into foods and other important household items. Although she has taught thousands of women how to conserve food values in cooking, Dr. Mack seldom does her own cooking. "Frankly," she says, "I never liked cooking, and after investing all my time and thousands of dollars in a scientific education, it never made any sense to me to do it personally. Any businessman would understand this."



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The Fish That Spoke English

(Continued from page 42)

the fish. "You know that I'll need a constant supply of good, clear sea water. And plenty of food. Shrimp, shelled, if you please."

"I know," said Hacklefarber. "Don't worry."

The solution, of course, was the bathtub. "How would you like to live in the tub?" he asked the fish.

"It'd certainly be better than this but couldn't you provide a little sand, and perhaps a few shells, or something?"

"I'll see what can be done. Anyway, you'll have a nice, clean tub all filled with sea water," Hacklefarber carefully closed the tub drain, and poured the bucket of water, and the whiting, into the tub. "Now I want you to be quiet, Whitey," he said, "while I get you fixed up for the night." He didn't want Mrs. Bashor, or Pete, to learn that his fish could talk.

"Okay," said the fish.

Hacklefarber left his apartment and called downstairs, "Pete, can you come up here a minute?"

"Sure," said Pete, racing up the stairs.

Hacklefarber led Pete into the bathroom. The fish was swimming in water that barely covered the bottom of the tub. "You goin' to keep him, like a pet?" Pete asked.

"Sort of. And he needs lots of salt water. How would you like to take this bucket down to the dock and fill it up? I'll give you a nickel for every bucket you empty into the tub."

Pete estimated the distance to the dock, the weight of water, and the size of the tub. "Can do better mowing lawns, or washing cars," he said.

"A dime then."

Pete hesitated. "All right. A dime."

When the tub was three-fourths full, Hacklefarber paid Pete 90 cents, and said that every evening thereafter Pete should bring three buckets. When the boy was gone, Hacklefarber sat down beside the tub and said, "Well, I suppose you're too sleepy to start now."

"Not a bit of it," said the fish. "Quicker I start the quicker I'll get it over with. What would you like to know first?"

"I'd like to start with sea trout," said Hacklefarber. "I never have any luck with them, plugging."

"If you're going to plug for sea trout," said the fish, "the first thing to remember is that a plug

that looks most alluring to a man may seem absolutely revolting to a fish. As a matter of fact, most baits are designed to catch fishermen, not fish."

"I have often suspected that," said Hacklefarber. "Last year I spent \$789.60 on tackle, and the more I bought, the less I caught."

"A sea trout," said the whiting, "will eat almost anything that is smaller than himself and that moves, but live shrimp send him. So your plug should resemble a live shrimp."

"I have quantities of lures that look like live shrimp."

"Aha! That is it!" said the fish.



"And we wish to thank the makers of Nuttsy-bits for not relinquishing their time—thus preventing a long-winded political broadcast"

"They look like a shrimp to you, but they don't to a trout. Now what you want is a clothespin lure weighing about an ounce, painted white, with a red nose. The whole secret is in the movement. As you retrieve this lure, you should twitch your wrist with every turn of the reel. This makes the plug dart through the water, exactly like a shrimp trying to escape a fish."

"Oh," said Hacklefarber.

"Oh, indeed," said the fish. "And the second thing about sea trout is this—no use trying for them with a plug unless the water is clear. That goes for pompano and mackerel and blues too, but we'll get to them later. The sea trout doesn't smell out his food, he sees it. He can't see it in cloudy water."

The whiting went on for perhaps 30 minutes. Through most of this time the boy, Pete, listened outside the bathroom door. When he was satisfied that he knew what was happening, he went downstairs to his mother.

"You were up there long enough," said the widow Bashor. "What in the world is he doing?"

"He has a fish in the bathtub," said Pete, "and he is talking to it."

"A fish in one of my tubs! I won't stand for it," said Mrs. Bashor. "What is he saying?"

"At first I thought they were having a conversation—he and the fish," said Pete. "But I've got it figured out now. He's practicing ventriloquism."

"That poor, lonely man. What he needs is a good, sensible woman to take care of him." She determined to speak to Hacklefarber about keeping the fish in the tub.

The next day Hacklefarber caught 28 sea trout. Half of them he gave to the flabbergasted Mrs. Bashor, the others he distributed in the neighborhood, except one that he filleted for his breakfast.

The next morning, before he drove to work, he fed the whiting, locked the bathroom door, and pocketed the key. When he walked into the People's Friend Loans his manner was so unusual that his subordinates immediately noticed it. "My, Mr. Hacklefarber, you look fit today," said Marylu Pennington.

"Marylu," he said, tossing his hat at a hanger, "I slayed 'em! Caught 28 sea trout." He suddenly realized that for the first time he had called her Marylu.

"Oh, I didn't know you were a fisherman, Mr. Hacklefarber."

From behind one of the glass partitions which divided the inner office into cubicles came the voice of Percy Vinson, the assistant manager of the branch and a cousin of Mr. Pollock. "He isn't," the voice said. "He's having delusions."

"I caught 28," Hacklefarber insisted.

"Any witnesses?" asked Vinson.

"Next time I go out, I'll bring you one. Lay it right on your desk," said Hacklefarber.

Marylu Pennington hovered over his desk, a sheath of loan applications in her hand. As always, he was aware of her perfume. "You know, Mr. Hacklefarber," she said, "I love to fish, but nobody ever takes me."

"I fish every week end," said Hacklefarber. "Usually, I don't have much luck, but I think that's going to change. Would you—" He started to ask her to fish with him

next Saturday, but Vinson was listening. He finished the sentence, "Would you tell those people outside that I'll see them in a few minutes."

On that day, no applications for loans got turned down and Hacklefarber left the office 30 minutes before closing time, an unheard of thing.

When he unlocked his bathroom door, the fish raced up and down the tub. "I'm certainly glad to see you!" said the fish. "Somebody tried to get in here."

"Who?" asked Hacklefarber, dismayed.

"A woman. She tried four or five keys. You should have heard her swear."

"Must've been Mrs. Bashor," said Hacklefarber. "I've never heard her swear."

"She said, if I may quote, 'If that damn fish is in my tub I'm going to eat him, scales and all.'" The water around the whiting quivered, as if he had shuddered.

"Now, don't get excited, Whitey," said Hacklefarber. "I'll attend to her."

Hacklefarber went downstairs, and knocked on the door of Mrs. Bashor's bedroom. She opened it, clutching a faded pink robe around her. "Why, Mr. Hacklefarber," she said, "You're home early."

"Mrs. Bashor," he said, "did you try to get into my bathroom?"

"Why, Mr. Hacklefarber! I was just straightening up your room, as you know I often do. I don't remember trying to get into your bathroom. Who told you I tried to get into your bathroom?"

"The fish," said Hacklefarber before he thought. He stammered, "I mean the fish—the fish is in my bathroom."

Mrs. Bashor regarded her tenant searchingly. She noted that his eyes seemed larger than usual behind the spectacles, and glowed strangely. "I was just going to talk to you about that," she said soothingly. "Mr. Hacklefarber, I really can't allow you to keep a fish in my tub. It's not sanitary. And anyway, how can you bathe?"

"How I bathe is no concern of yours," said Hacklefarber. "And keep out of my apartment."

"It will not be your apartment," said Mrs. Bashor, "after the end of the month."

Hacklefarber was sorry it had come to this. He had lived three reasonably pleasant years in the Bashor house, and the dock had been free. The eviction meant that he would not only have to move himself, but also his boat.

That evening the fish gave him

a long lecture on channel bass and stripers.

"I'll give them a try, next Saturday," said Hacklefarber.

The whiting appeared thoughtful. "Moon won't be right for them Saturday," he said. "They'll be feeding at night, with a full moon. Better go tomorrow."

"Have to work," said Hacklefarber. In 17 years he had not missed a day at People's Friend Loans, except the winter he had virus X.

"You can do as you please," said the fish. "But I'm getting pretty lonely. If we don't get these seminars over and put me back where I belong, I'm going to clam up."

"You wouldn't," said Hacklefarber, feeling betrayed.

"Oh, wouldn't I!" said the fish.

The next day Hacklefarber called the office and spoke to Miss Pennington. "I won't be in today," he said. "If anyone asks, I'm out-of-town tracing skips. But what I'm really going to do, Marylu, is go fishing. You're the only person I'd tell."

"Good," she said. "Wish I was with you."

"One of these days you will come with me, won't you?"

"I'd love it."

On Wednesday morning Hacklefarber staggered into the office bowed under a bulging sack. He walked directly into the cubicle of Percy Vinson, and emptied an enormous bass onto Vinson's desk. "There!" he said. "Fifty-six pounds. Biggest one ever caught on this coast. All weighed and registered."

Vinson stood up and backed away. "Get that thing out of here," he said.

All that day, Hacklefarber granted every loan.

Hacklefarber was missing again on Thursday. At the lunch hour, Vinson decided an investigation was necessary. He drove to Hacklefarber's home, and had a long talk with Mrs. Bashor, and Pete. When he returned to the office he called his cousin, Mr. Pollock.

"Steve," he said, "I'm sorry to tell you this, but Hacklefarber has blown his top." And he related the evidence.

On Friday morning, when Hacklefarber arrived at the office, Pollock sent for him. Pollock, a large, affable man who smoked cigars, could measure a man's financial state with a single glance.

"Sit down, Gerald," he told Hacklefarber. "I'm afraid we're going to have to have a serious talk."

"Why, of course, Mr. Pollock,"

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Hacklefarber said, seating himself.

"What are you trying to be—a philanthropist?" Pollock began. "You've approved more loans in two days than this branch usually approves in two weeks."

"I have faith in those people," said Hacklefarber.

"Well, if they default, I guess you'll pay for 'em, heh? That isn't all. What's wrong with you anyway, Hacklefarber?"

"What do you mean, sir?"

"Yesterday you brought a big fish in here and plunked it on Vinson's desk. What kind of business is that?"

"He asked for it, sir—"

"And two days this week you were off fishing. Said you were chasing skips."

Hacklefarber was silent.

"And what's this I hear about you talking to yourself? And how about keeping a fish in your bathtub? And what about trying to learn ventriloquism?"

"Isn't that a private affair?"

"No. It concerns the stability of this organization." Pollock took his cigar from his mouth and pointed it at Hacklefarber's chest. "Have you seen your doctor lately, Hacklefarber?"

Hacklefarber saw that desperate measures would be required, if he was to keep his job, and remain in the vicinity of Marylu Pennington. "I'll tell you the truth, Mr. Pollock. That fish has been teaching me to fish. That fish speaks English."

Pollock rose, and edged away, and when he spoke he spoke softly. "Well, that's just fine, Gerald," he said. "I think you ought to go home right now and look after your fish. And I think you should take a long rest, Gerald, a very long rest."

"But Mr. Pollock, if you'll just come up to my apartment, I'll prove it. I'm not crazy, Mr. Pollock."

"No, of course not, Gerald. But you'd better take a nice, long rest. Good-by, Mr. Hacklefarber."

That night Hacklefarber didn't have his heart in his lesson, although the fish told him fascinating things about blues, and pompano, and drum, and snapper, and even gave him some basic information on such big game fish as tarpon and sail and tuna.

At last the fish said, "Hack, that's it. You should now be the world's best fisherman. Now you keep your part of the bargain. Tomorrow, put me back in the ocean. I'm not saying one more word."

"But Whitey—"

A trail of bubbles but no sound came from the fish's mouth.

In the morning Hacklefarber

rose late, because worry had kept him awake until past midnight. After he shaved, he transferred Whitey to the bucket. He was on his way down the porch stairs, carrying the bucket, when he saw Marylu Pennington get out of her car. She walked over to him and gazed into the bucket.

"So that's the famous talking fish," she said.

"What do you know about him?"

"I heard the whole thing in the office yesterday. I'm so sorry, Mr. Hacklefarber."

"You think I'm crazy, don't you?"

"No, Gerald. Perhaps overworked, but not crazy."

"Marylu, this fish really did talk. A lot. Whitey, say something. Say anything."

The fish said nothing.

"Now Gerald, don't worry," said Marylu. "If you say you caught 28 speckled trout, I believe you. If you say that fish talked, it's all right with me."

Hacklefarber said, "Marylu, I love you. I'd ask you to marry me, Marylu, but first I've got to get another job and forget this fish."

"That's a very healthy attitude," she said. "Incidentally, where are you taking the fish?"

"I'm just going to dump him off the end of the dock and let him swim to sea," said Hacklefarber.

"That's fine," she said, helping him with the bucket.

"You see, Whitey and I had an agreement," Hacklefarber said as they walked toward the dock. "If he taught me all there was to know about fishing, I was to let him loose. Well, he's kept his part of the bargain, and now I'm going to keep mine."

When they reached the end of the dock Hacklefarber leaned over and tilted the bucket. "Good-by, Whitey," he said.

As the fish slithered over the edge he said, "Good-by, Hack." Then he disappeared.

"There!" yelled Hacklefarber, dancing up and down. "You heard it! You heard it, didn't you?"

"Oh, stop being silly," said Marylu. She laughed. "You were practicing ventriloquism, weren't you, dear?"

She took his arm and they walked back toward the house, and he saw that there was no use arguing. Perhaps, in years to come, when their home was overflowing with trophies and she was sated with fish dinners, she might believe him.

Atomic Age Greenhouse

(Continued from page 29)

tomato plants. The same variety, started at the same time, grown under identical conditions except for temperatures, range from 18 inches to as high as seven feet.

Nor does the whole effect rest on the average temperature for 24 hours. Night temperature, heretofore thought irrelevant, is found to be just as critical—or more so—as the daytime readings. Sometimes night temperature can be virtual arbiter of crop success or failure.

Take tomatoes. Study shows that the important temperature is the night reading, and that the best mark for setting fruit is slightly more than 60 degrees Fahrenheit. Make it only three degrees warmer, and the fruit set drops 80 per cent. Discovery that the tomato does business according to such a fine temperature line as this has enabled investigators to raise the plant's photosynthetic efficiency in the laboratory to 20 per cent, or more than ten times what nature, left to herself, usually settles for.

For potatoes the best mark is a bit lower: slightly greater than 50

degrees. As it gets warmer, like tomatoes, they produce less. At 68 degrees they produce nothing. Again, the night temperature is the important one.

This finding has been borne out in the vast potato lands of California's Kern County. A group of growers there were watering their potato fields daily. They didn't know why, but these heavily watered plants produced far more potatoes than the average for the area under normal watering. Finally, curious academicians thrust thermometers into the waterlogged soil and found that it was much cooler than the other soil.

Another plant which turns out to be hypersensitive to temperature, especially at night, is the sugar beet. The cooler it is, within reason, the more sugar it makes. This was discovered at the phytotron by Dr. Albert Ulrich of the University of California who was sent there by California's sugar beet growers to try to boost the beet's sugar. Normally this varies between five and 18 per cent, with 12 per cent the least commercially worthwhile.

Ulrich found that the key to his

goal apparently lay in cool nights. This information reached sugar beet growers in Holland, who soon had an opportunity to try it out. The Dutch beet harvest was beginning, and the sugar content was low. Then for a week the nights turned sharply cooler. The sugar level came up. Learning that the forecast was for continued cool, and having in mind Ulrich's results, the growers held off operations another week. At the end of the two weeks sugar content had risen *two per cent, or 20 times the best the Californians had hoped for.*

Equally critical is light: what brightness and for how long and at what intervals? "Photoperiod," scientists call it, "photo" being Greek for light. Not only is one tenth of a foot candle, equal to the light from a bright, full moon, enough to make some plants react but, only slightly increased, the light needs to last only a second. People don't laugh quite so hard any more at the notion that potatoes should be planted according to what phase the moon is in.

The influence of photoperiodism is especially apparent at flowering time. A single flash, or the night ending a few seconds too soon, can mean no blooms. This secret has been useful to Hawaiian sugar cane men. Flowering of the cane is a waste of energy, cutting down on the plant's sugar manufacture. To prevent it the growers give the fields a burst of light one night around blossom time, using a searchlight which swings around like an aircraft beacon. Once around does it.

A further valuable discovery the phytotron has made is that temperature and light are highly interactive, and may each be used to make up a deficiency in the other. Strawberries, for instance, have a reputation for liking their days short and cool. Now it develops that it doesn't matter how long the day is—it can be 24 hours—so long as it's cold enough. And the colder it is, the bigger and sweeter the berries are.

The interrelation between temperature and light is getting close study by young Herr Kay Verkerk of Holland. Verkerk is here to determine for his government what can be done to offset the shortage of daylight at home during the early spring, when the practice is to grow big lots of tomatoes in a hurry for export to England.

Verkerk is quite sure that his answer lies in artificial light—that and sugar spray. Applied to the leaves of certain plants like toma-

atoes, sugar spray promotes growth, tending to overcome the adverse effect of the wrong light or temperature.

That there is a growth-promoting substance naturally present in the leaves is evident from another eye-blinking discovery. A heavy, drenching rain isn't really good for some plants, the way it looks. In the rain room of the phytotron rain poured down for four hours a day on tomatoes. The plants directly under the downpour grew only half as big as those around the edge of the room, where the rain tapered off.

As to the effects of smog on growing things, tests by Dr. Herbert M. Hull, a blond youngster with a crew cut who piloted an Air Force plane in the Pacific during the war, show to this point that 16 different kinds of plants get hurt by smog. The injury ranges from moderate to extreme, and the marks are seen in 12 to 24 hours after exposure.

Most vulnerable are leaf crops: lettuce, endive, spinach, and the like. Not only is the foliage affected, showing first an oily look, then burned spots, but the entire development is retarded.

For all the exploration underway at the phytotron, the limit of its potentials is still far from reached. "We are constantly finding more things which can be investigated under the conditions we have here," declares Went feelingly. "We know practically nothing about the relationship between climate and plant growth as yet."

Eventually, with the help of secrets laid open by the phytotron, it may be possible to go farther than simply to adapt the plant to the climate. Possibly the plant can be modified to suit conditions. Pursuing this line at the moment is Luis Gregory of the United States Department of Agriculture. Gregory, who hails from Puerto Rico, is working with potatoes, an important but costly food in his homeland, which is too warm to raise spuds and imports them from the United States.

Without the right temperature there can be no potatoes. But temperature, Gregory philosophized, is only the trigger. What pulls the trigger? "If I can find that out maybe we can grow potatoes in Puerto Rico."

To men working at the phytotron, if the world runs short of victuals, it won't be nature's fault. "There is at present no excuse for hunger, biologically speaking," declares Went with emphasis. "If we can find a way to distribute the food, science will produce it."

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Albany's Way of Making Hay

(Continued from page 36)

that "we live in an area now, not just a community." That belief has even taken him across the state line, with no objections whatever from headquarters. He has worked hard to help create the Southern Tier Association of Chambers of Commerce, affiliating a score of Chambers in an interrelated region of some 5,000 square miles—including five in Pennsylvania. They may pay their taxes to Harrisburg instead of Albany, but their prosperity ties in closely with that of their New York neighbors, and that's good enough for Ehlman and his sagacious superiors.

Long Island beyond the New York City line is the region handled for Commerce by John F. Deming. Its recent boom in industrial development was creating an awkward whipsaw between manufacturers who wanted factory sites and appropriate housing and established local interests who liked the place the way it was. In 1949 Commerce, unobtrusively lubricating matters through Deming's skilled diplomacy, encouraged the Long Island Association to stage a great regional fair, complete with a pageant put on by local colleges, to dramatize the stimulating variety of products and the economic benefits implied in intelligent industrialization. The climate has been markedly warmer ever since. Nassau County, the section nearer New York City, is leading the state in population growth. And the fair has become a highly valued annual institution.

As any hotel menu indicates, Long Island means ducks. For Deming, ducks mean problems. Some while ago a phone call from the Long Island Duck Growers' Marketing Corporation, which handles some 5,000,000 birds a year, told him that the industry was approaching its new production year with a cool 4,000,000 still in the refrigerators. Unless something happened fast, the Island was going to be up to here in surplus ducks.

Deming rubbed the lamp and something happened fast. In less time than it takes to say quack, both state and federal governments were flooding the nation with propaganda about the economy, deliciousness, ease of cooking and high vitamin content of Long Island duck. They moved 2,000,000 birds before the new crop started coming in.

The state's new water-pollution program has also meant duck trouble, even though no big sticks appear here either. The idea, says Albany, is not "to make everything into a trout stream" but to conserve and, where possible, recapture the blessings of cleaner salt or fresh water. The Water Pollution Control Board can issue orders but so far it never has. Taking its cue from the general atmosphere, it prefers to work without scolding in close consultation with experts from industries intimately concerned.

Ducks got into the act because they are raised near water. Most Long Island duck farms drain into a practically landlocked body of salt water called Moriches Bay. And ducks' processes of elimination work steadily. When duck-associated pollution caused the state seasonally to prohibit clamming in the bay, local clambers—sorry, this is irresistible—raised a clamor.

The regulatory tradition would have made government growl "Clean up or close up." Instead the state gave the duck-farmers until mid-1953 to work out answers and has gone far out of its way to suggest possibilities.

State research facilities at Cornell University are helping study how to convert duck-droppings into fertilizer valuable enough to pay the cost of better disposal. Thus gentled, the industry is already working on new drainage methods and has appropriated \$15,000 for scientific research. When asked, the industry says: "No, we don't feel pushed around at all." Score another for using the velvet glove while altogether eschewing the hand of steel.



The very little fellow gets plenty out of Commerce too. New Yorkers are learning that anybody thinking of going into business, from a baby-sitting agency to reviving Adirondack iron mining, has only to say so to get a cordial invitation from Commerce to come in and talk it over. Such queries are running three times heavier this year than last in Deming's Mineola office.

A local man is thinking of starting a motel. The regional manager goes into it with him as thoroughly as if it were his own deal. What's your experience in the hotel or motel business? What do you figure to invest? What spots have you in mind? From the state highway department comes traffic-flow information and advice as to possible effects of the new arterial highway on tourists' driving patterns. As locations look likely, the manager goes to check in person with the inquirer. He investigates methods of supplementary financing and helps arrange necessary contacts.

Another inquirer wants to start a stationery store, a field in which he is experienced, but the town he has in mind is already oversupplied with that service. The regional manager studies the map, uses his vast knowledge of the area, and suggests a smaller town nearby where such a store will fill a real need. The inquirer locates there and business flourishes.

A veteran has bought a run-down gas station and found to his dismay, though the seller said nothing about such a possible complication, that the oil company whose pumps are there won't give him a contract. Commerce's regional manager is appealed to, goes over the head of the local company staff, gets the veteran an interview with a man higher up, the boy makes a good impression—and the contract is approved.

Next day he digs up an experienced local man to advise another youngster thinking of buying a cigar store. Next he is beating the bushes for new sources of orders for a small woodworking plant in trouble because wooden station wagons are going out.

Random sampling of a regional query file showed instances of advice thus given on tropical fish, Venetian blinds, beer delivery, antiques, delicatessens.

The motto is: "Never say, No, we can't help. If you don't know the answers, go find them."

But it isn't all just skillful encouragement. An inquirer with inadequate capital or experience or

unsuitable personality is frankly told he better not. This often averts economic tragedy. Deming likes to think that New York's recent record of fewer small business failures is in some measure due to such activity.

Commerce's best publicized activity is its woman's program under Miss Jane H. Todd, a solid, easygoing and capable woman who is also vice chairman of the state Republican Party. Her girls do liaison work for the shopping-habit surveys. But their chief concern is counseling women who want to go into a business of their own. Six years of that have processed 15,000 queries.

SUCH projects typically begin because some friend keeps saying: "Your spaghetti sauce is so wonderful, I bet you'd make money selling it." Or it may be soybean bread or cooking herbs or pickles or damson jam or salad dressing or an original breed of cookie. Under intelligent steering, women often find their friends were right.

Or it can be a florist's business built on home-developed skill. Or fancy rag dolls or special baby shoes or children's dresses or costume jewelry or home-woven textiles as women's hobbies pay off.

Miss Todd's girls feel so strongly that female enterprise is a good idea that they don't wait for queries, they go after them. So far their mass "clinics" in key towns, where ladies with ideas are invited to hear basic good advice and success stories, have attracted more than 20,000 women.

Both sexes, as well as all sizes of industry, have good reason gratefully to regard what the State University of New York is doing to train New Yorkers in crucially needed technical skills. The University's five new Institutes of Applied Arts and Sciences represent the broadest such program in the nation.

World War II showed a huge gap just here in American education. The supply of graduate engineers and Sc. D. chemists was short enough. That of labor able and willing to learn semiskilled production jobs was none too copious. But that of trained under-technicians to be eyes, hands and brains for supervising engineers and researchers was practically nonexistent.

So now several thousand well screened young New Yorkers are having two tuition-free years of intensive, realistic training in basic chemistry, electronics, mechanics, building, automotive technology,

metallurgy, optics and textile-manufacture.

These institutes keep closely in touch with prospective employers and supervisors. Their automotive training aims not to turn out just some more rule-of-thumb parts-changers but men able to handle complicated problems in hydraulics and motor diagnosis—along lines approved or suggested by automobile manufacturers and dealers. Such advice is consistently sought on the shop-supervision level rather than from the front office.

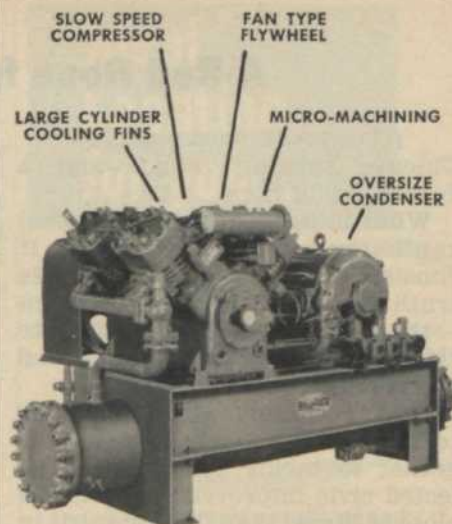
How well it works in Buffalo, Binghamton, Brooklyn and so forth is plain in industry's hunger for its graduates. So far, there are five or six openings for every graduate.

Tactful meeting of industry's needs can extend even farther—as when Commerce found that new industry was shy of New York and established industry was restless because her unemployment insurance laws lacked the "merit-rating" feature. That is, the state payroll tax backing such insurance did not distinguish between the employer with low personnel turnover or year-round production and the one with high turnover or sharply seasonal operation. Thus stabilized employers partly paid for the shortcomings, whether inevitable or feckless, of the unstable.

Eliminating that bug might well have meant a multi-cornered and noisy tug of war involving legislative committees, business and industrial groups, individual large employers and government experts ramming slide rules down everybody's throats.

THE way Commerce lubricated things, instead of hauling and screaming there was cautious, mutual consultation, with legislators, state officials and personnel men from large and small outfits, all seeking genuine areas of agreement. The end product last year was readjusted legislation reducing the handicap and putting into operation incentives toward low turnover. Beginning last April, the new law should save stable New York employers some \$60,000,000 a year.

When trying to explain his slant on government treatment of business, Commissioner Keller usually points first to that bit of recent history. He has plenty of others to pick from. He would be indeed a happy man if only he could be sure that the legislature may not try again to give him an ax when he prefers a grease gun.



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A Red Rose from Teacher

(Continued from page 39)

Chicago nursing school—and a future full of hope.

What happened in Bloomington can happen in any community. It consists of rediscovering a simple truth many towns have forgotten—that the life of a community like the life of a family revolves around the rearing of its young.

Once Bloomington got together to improve its schools, it stayed together to tackle other long neglected civic improvements. At the close of World War II, civic spirit in this self-styled "hub of the corn belt" was at a low ebb.

New wealth poured in from farm and factory but the town had slipped into a lethargy that was close to sleeping sickness.

Over at the *Daily Pantagraph*, General Manager Joe M. Bunting and Editor H. Clay Tate decided the town needed waking up. At their suggestion a handful of citizens met at the Association of Commerce, hired a city planner out of their own pockets to help draft a long-range program, then formed the Better Bloomington Committee to campaign for it. Tate was chairman of the educational panel of this committee which drafted a long-range school improvement program.

When Wells came to Bloomington the townsfolk wanted better schools—just as they wanted better streets and a better sewage system. But few of the 36,000 residents knew what went on inside the schools or considered it important to find out. They paid their taxes and expected their money's worth in something called "education." Wells knew he could never give it to them until he knocked down the walls that separated what went on in the classroom from what went on in the community.

THE reason was simple: the school is the community in microcosm. The things a child is taught there are no good to him unless they also apply in his home and in the community at large. An education, Wells told the board of education, isn't just a lot of facts

squeezed into a child's head like coins in a toy bank. It's something that happens inside him, a part of the experience of growing up that prepares him to make his own way in the world. Going to school is his first real encounter with society. If he fails in his adjustment to school, he is very apt to fail in his adjustment to the adult world.

It simply didn't make sense to Wells or to his board that the youngsters who were most in need of school help in life adjustment were the first ones to drop out and grapple with adult problems. Why did they drop out? The popular view among laymen is that it's because they're dumb, lazy or just no good. But in Bloomington, Wells, Principal P. C. Kurtz and the



school board took the trouble to get the facts.

At their request the University of Illinois College of Education made available to them the services of a consulting team headed by Dr. Harold C. Hand who had just directed a survey of school conditions in some 900 Illinois communities, including Bloomington. His own findings, which agreed with recent surveys in almost all states, showed that except for a small minority of low I.Q.s, the youngsters who drop out of school have as much native intelligence and ability as those who finish.

The main reason for their failure, Dr. Hand pointed out, is a family background which makes it hard for them to feel they "belong" in most schools or that what they learn there will ever be of any use to them. Given children of equal

intelligence, any educator worth his salt can usually predict how far any one of them would go in school simply by learning what his father or mother does for a living. Eighty per cent of the upper and middle class children in this country go on to college while only 20 per cent of the lower middle class and a mere five per cent of lower class children get there.

WHILE almost everything in the home life of upper and middle class children encourages them to make good in school, the lower class child is often conditioned to look on school with hostility or indifference. His manners, values and attitudes appear "bad" to teachers who unconsciously fail to make allowances for the fact the kids were brought up that way.

Again, children unthinkingly draw the same class lines as adults, shun classmates they consider beneath them, prefer to make friends with their own kind or those above them. Thus the lower class child is often left out of the social activities which would give him a feeling of being one of the gang. Instead of increasing his self respect and good will, it gives him a sense of failure and isolation. He wants to get out as soon as he can.

Bloomington exhibits just about the same social divisions you'd find in any typically American community. Wells cut through them all with the clear-cut challenge: How can we give all our kids a better break in life?

The spirit in which the town responded is illustrated by one of the more conservative businessmen who opened a charge account at a local florist shop and invited the visiting teacher, Bess Hibarger, to order red roses "whenever they are needed." Mostly they go to convalescents in homes or hospitals. But the ailments that incapacitate children for schoolwork aren't always purely physical. Often the child who plays hooky is just as "sick" emotionally as the child who is running a fever. Today when such a child skips school he's likely as not to receive a red rose and a note from his class: "Just to let you know we are thinking of you." Roses have been a lot more effective than summonses from a truant officer.

When Wells came to Bloomington, many students felt pointedly left out of the high school social life which was dominated by "exclusive" secret clubs—the "Hot Shots" and "Jolly Fellows" among the boys, and the "Tri Detties" and

the "Mitzi's 20" among the girls. The clubs violated state law and were widely resented in the town. But pressure from prominent alumni kept them alive.

Unable to ban them without widening a social rift, the board abolished their secrecy features, opened up their membership to all students—and then cut the ground from under them by throwing school parties that were more fun than anything the clubs were able to cook up among their own cliques.

"We're great party givers," says Wells, and there's a reason. The social evenings bring students and townsfolk together in a festive atmosphere which makes it quite natural for banker Jones and his wife to chat with section hand Smith and his wife—while young Gracie Jones dances with Jackie Smith. No matter who you are or what you do for a living in Bloomington you are sure to be involved with teachers, administrators and students in concerts, movies, sports events, adult education courses, public rallies and social events put on by the public schools.

PUBLIC education is officially free. But Dr. Hand's survey of hundreds of public schools revealed "hidden tuition charges" which increase with each advance in grade. In high school these hidden tuition costs—exclusive of food, clothing and transportation—amount to from \$125 to \$200 or more a year—a real sacrifice for about half the families involved. Most of this cost is for participation in the extra-class activities that make a boy or girl feel he really "belongs."

Hand's study showed that children from upper-income families spent three times more on such activities than the others—and were correspondingly more active and popular.

"Free Activities Ticket" admitting students to all school functions was the Board's first move to bring in those who couldn't afford the price of admission. Yearbook, student paper, school band and other activities were reorganized to pay their own way—without cost to participants. The purchase of class rings and insignia was discouraged. By renting out textbooks at an annual fee of \$4 (waived for the neediest), the high school saved each student another \$25 a year—at no cost to taxpayers.

In addition to making free public education freer, Bloomington also made it more public. The board of education, made up of the

more prosperous and successful business and professional people, was elected by a mere handful of interested voters. Members were public spirited citizens who sincerely tried to decide wisely for the good of the whole community. But more than half the students in public schools came from families in lower income ranks, and it was important to Wells that these people felt that their problems were understood and their interests represented in the school administration.

WHY not, suggested Wells, form a Citizens' Advisory Council to represent the whole community—every income level and every neighborhood. The school board was all for it. But how to set it up? In the past such committees had failed because they consisted largely of paid representatives of various groups—each with his own organizational ax to grind. This time, simply by passing around by word of mouth the question, "Who do you think would be a good member?" the board collected more than 1,000 names of people who were trusted and respected in their neighborhood. The list was reduced to 30 men and women of every race, religion, income level and neighborhood.

These grassroots leaders meet every month, and provide two-way communication between the schools and every element of the population. One of their first projects, undertaken with the help of Dr. Hand, was a city-wide opinion survey which gave everyone, parent or nonparent, a chance to say what he liked and what he didn't like about the schools—and what he wanted done about it. The results, tabulated in a 36-page booklet and discussed in several public meetings, are now the "bible" by which the board shapes its administrative policies.

What kind of advice can the citizenry of a town give its educational authorities about running its schools?

Overwhelmingly, the 3,000 parents and 1,200 nonparents who took part in the survey demanded more connection between public education and real life problems. In high school they wanted their children to develop their abilities for earning a living, to prepare themselves for marriage and parenthood, to find out more about the world they're living in, to learn how to handle money, how to "get along with other people," and, as one housewife wrote in her questionnaire, "how to be somebody

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themselves and not all the time Bob Hope or Elizabeth Taylor."

That was exactly what Superintendent Wells wanted to be told. High school boys and girls now take a course in "Family Living." After the first year, parents were so impressed with what their children learned about the facts of married life that they requested a similar course be given for adults attending night schools.

A Citizenship Education Program, modeled on the lines suggested by General Eisenhower while he was at Columbia University, now sends boys and girls out into the community, taking surveys and opinion polls, getting out the vote at elections, visiting farms and factories, interviewing city officials and debating local and national issues. It's a real dress rehearsal for maturity.

Teachers, too, now take their part in community affairs, visit parents as a matter of course, rub elbows with leading citizens on boards and committees devoted to civic betterment. During "Business Education Week" sponsored by the Association of Commerce, businessmen spend a full day visiting the schools, reciprocate by taking teachers in groups of ten and 20 on tours of stores and factories, and entertaining them at dinner. "I saw the fathers of my students at their work," a teacher told me, "one behind a lathe, another be-

hind an executive's desk, another stripping feathers from scalded chickens in a poultry plant. You'd be surprised how much better you understand a child when you know how his father earns the family's daily bread."

Today the teachers are accepted as professionals on a par with doctors and lawyers. With hardly a squawk from anybody the school board recently voted away the ban on married teachers, hired more men, decreed equal pay for men and women, and raised salaries to levels which, according to a recent poll, satisfy even the teachers.

Even for the 20 per cent or so of high school students who go on to college, the ordinary academic courses of most high schools leave much to be desired in terms of "life adjustment." For most of the other 80 per cent of high school students, the straight college preparatory curriculum doesn't make sense. Apart from certain courses in language, mathematics and history to give them the basic tools of learning, Bloomington developed a dozen new courses to give these kids the training and experience needed to handle the adult problems they face immediately on graduation. The schools also give two courses in vocational training which give each student on-the-job training as a "pre-apprentice."

Now, besides giving a child the kind of courses best suited to his

skills and interests, Bloomington adjusts the load so that with reasonable effort he can attain success. Aptitude, personality and intelligence tests are given systematically in every grade, but even more important are the personal appraisals handed down through the years by the child's various teachers. On entering high school he is assigned to a "home room teacher" who stays with him till graduation and is thus able to take a long range, personal interest in his progress.

When a child misbehaves, guidance director Emaline Kollman tries to get to the bottom of his problem and to do something about it with the help of his teachers, his parents and various community agencies.

The more complex our society becomes, the more trained intelligence we need to run it. The use we make of our brain power reserves in the rising generation depends directly on the way we run our public schools. We can continue to squeeze out half our youth before they have a chance to show their stuff—or we can exploit the best that all our youngsters have in them to contribute.

As superintendent Wells sees it, that is a question that can be decided only by all the elements of a town acting as a community. When that happens, the schools can't help being good.

WHEN YOUR NEIGHBOR CALLS TO SELL

EVER since the first so-called "Yankee Trader" loaded his goods on his back or a pack animal and set out to visit the frontier, the house-to-house salesman's place in the distribution scene has been the subject of debate. Even in Colonial days these venders were the victims of prohibitive and punitive legislation. The fact that they have survived at all demonstrates this type of selling is popular with customers.

To explain this effectiveness and to clarify understanding of the door-to-door salesman's contribution to better living the National Better Business Bureau, Inc., has published a pamphlet, "The Right of Free Men to Engage in Legitimate Business." Among other things it says:

"The great majority of these men and women are your neighbors. The original 'Yankee peddler' has his descendants in the itinerant salesmen of today and these transient vendors are among the

best customers of such local business firms as hotels, garages and service stations, laundries, dry cleaners, restaurants and many others.

"The money they spend in these establishments filters into other business channels in the community.

"Nowadays, however, 88 per cent of all direct salespersons live in the communities in which they carry on their work. The dollars they earn are returned to the community to purchase food, shelter and clothing for themselves and their families.

"They vote, participate in local activities, go to church, and send their children to school in the community in which they earn their livelihood. . . ."

Pointing out that, for certain kinds of goods, no other truly effective means of selling has been discovered, the pamphlet adds:

"A list of products, now in everyday use but originally introduced

by direct sellers, would read like an inventory of the average, comfortable American household. Certain kinds of products seem to demand the direct demonstration method of selling to introduce them when they are first placed on the market. Apparently it is not enough to tell people how they can benefit from the possession of these goods—they must be shown in their own homes.

"Thus the door-to-door salesman is a creative, educational force in our economy. He does not take a market away from the local merchant so often as he creates a new market. In the long run, the retail merchant benefits from the creative selling and personal demonstrations of the direct seller. He creates the buying desires which develop into an expanding market. The result is that every sale made by the direct seller is multiplied over and over again and these sales, for the most part, go to the local merchant."

California Moves the Rain

(Continued from page 34)

river's waters to where they were most needed.

The first machine-dug river to be completed was the 100-mile All-American Canal, diverting Colorado River water near Yuma across the desert to irrigate more than 500,000 acres of Coachella and Imperial Valley farm lands. The canal freed Southern California farmers from an earlier deal with Mexico by which their irrigation water was brought via an older canal running south of the border, an arrangement that required them to deliver water free to Mexican growers.

Next a spectacular demonstration of river-moving tapped the Colorado 150 miles below Hoover Dam, where waters from Lake Havasu, created by Parker Dam, were detoured into the Southern California Metropolitan Aqueduct, which rates as the greatest aqueduct yet built. Parker Dam, though built and owned by the federal Government (because the Colorado rates as a navigable stream), was paid for by the Metropolitan Aqueduct, owned by 44 Southern California communities.

The aqueduct, which serves Southern California communities as far distant as San Diego, is a 340-mile concreted ditch scooped out of the desert and across the Southern California plains. At one point it flows uphill to an elevation of 1,617 feet, boosted by four batteries of huge pumps. At a dozen points it plunges via 40 miles of tunnels bored through the Coachella and San Jacinto mountain ranges.

The aqueduct is capable of diverting 1,000,000,000 gallons of Rocky Mountain water daily to the 44 Southern California cities it serves. The All-American Canal carries up to 3,000,000 acre-feet. These diversions, plus others for smaller irrigation projects adjoining the Colorado, consume the 5,000,000 acre-feet that Californians are allotted by federal contract from the Colorado.

Unfortunately, in the years since Hoover Dam was completed, the Colorado has failed to average the 16,000,000 acre-feet a year the experts thought they could divide among the seven states bordering the river, all of them now partners in the Colorado River Compact. To further aggravate the shortage, the Roosevelt Administration granted Mexico 1,500,000 acre-feet

of Colorado River water. As a result there is less water in the river than exists on paper.

Southern Californians estimate that they must find some 2,000,000 additional acre-feet of water annually to meet needs. After eyeing the Columbia but shying away from further controversy with neighboring states, they have settled for the surplus from the Feather River, a tributary of the Sacramento. The Feather, second largest stream emptying into the Sacramento Valley, has an average annual flow of 4,500,000 acre-feet and at its spring crest the runoff contributes overgenerously to valley floods.

Each year there is a surplus of at least 1,800,000 acre-feet, if the spare water can be captured behind dams and moved 700 miles across sloughs and over rugged mile-high mountains. This is what Californians propose to do in the Feather River Project, authorized by the 1951 state legislature.

The project calls for a 710-foot dam near Oroville that will store 3,500,000 acre-feet of water, more than three fourths of the Feather's annual average runoff. This storage will alleviate the flood problem in the Sacramento Valley lowlands. The flood waters will be released in constant volume downriver to the Delta region, where several rivers join in a diked island region known as "the California Netherlands." A cross channel will divert the water between the islands to a point west of Stockton in the San Joaquin Valley. Here pumps will lift it into the intake of a 567-mile long canal, starting in the hills in the west side of the San Joaquin Valley.

For some 200 miles the water will flow up the San Joaquin Valley by gravity. This will be feasible because the canal winding along the hills gradually will drop down to the valley floor. When it has gone as far as it can by gravity, the water will be boosted by pumps to a new elevation. In all, there will be 16 pumping plants, and at its high point this man-made river will be lifted to an elevation of 3,460 feet in the Tehachapi Mountains, from whence it will flow by gravity into the already completed Southern California system of aqueducts and reservoirs.

En route some of the Feather River water will be boosted over the Coast Range to thirsty Santa



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Barbara. At its farthest destination, Horsethief Canyon in San Diego County, the Feather River water will be more than 700 miles from its source on the slopes of Mt. Lassen. The cost of moving the Feather River from Northern to Southern California is estimated at \$1,250,000,000.

The California river movers know that this scheme will work, because they already are employing it to divert the flood waters of the Sacramento River, which originates on the slopes of Mt. Shasta on the northern boundary of the state, 500 miles south to the parched San Joaquin Valley. This is the Central Valley Project, a billion-dollar-plus river-moving undertaking that is more than half completed at this time.

Roaring out of the Sierra Nevada Mountains each spring were nearly two dozen rivers, pouring their floods into the Sacramento and San Joaquin valleys, known together as the Great Interior Valley, a vast level ancient lake bed comprising 9,000,000 acres, of which about one third are already under irrigation. The valley is the richest food and fiber producing area of its kind on earth.

Each summer, a few weeks after the peak runoff, the San Joaquin part of the Great Valley, with two thirds of the acreage, lay parched in the burning sun, except for the areas fed by waters from small irrigation districts or pumped from underground sources, rapidly being depleted. The Sacramento part of the valley, with one third of the land, had two thirds of the moisture.

Down in the productive Delta country, where the Sacramento and San Joaquin join, farms protected by dikes during the spring floods were menaced each summer by salty tides creeping inland as the fresh water flow receded. In a normal year the Sacramento and San Joaquin river systems, fed by two score tributary streams, emptied 33,000,000 acre-feet of fresh water into San Francisco Bay.

To correct this maladjustment, Hyatt and his engineers advocated construction of 24 dams. With the flood waters under control, the engineers proposed a general rearrangement of the Central Valley moisture. Waters of the upper San Joaquin, draining from the Mt. Whitney area, could be diverted from Friant Dam, east of Fresno, to the upper reaches of the San Joaquin Valley east of Bakersfield.

To compensate farmers downstream who depended on the San

Joaquin flow, the water movers proposed to bring Sacramento River water from the Mt. Shasta area, via gravity, downstream to the Delta area, then boost it via pumps into a canal along the west side hills and deliver it to the San Joaquin basin. The other rivers would be damned to hold their waters for other dry areas, including the Contra Costa district east of San Francisco and the Santa Clara Valley at the southern tip of San Francisco Bay.

This State Water Plan made so much sense that Californians voted a \$170,000,000 bond issue in 1933 to get it under way. Unfortunately, at the depth of the depression there was no market for the bonds for fantastic schemes of river moving. The Californians had to accept a federal Government offer of \$20,000,000 in WPA funds to get Shasta Dam started. At this point the U. S. Reclamation Bureau moved in. The U. S. Army Engineers were already in the picture, having launched a flood control study at the President's orders. Soon the Californians had three plans for saving their Sierra Nevada water crop: their own, calling for 24 dams; the Army Engineers' plan with 19 dams; the Reclamation Bureau engineers' program for 38 dams. Nineteen of the dams were identical in all three plans.

Reclamation Bureau engineers won out and launched construction of massive Shasta Dam to control the Sacramento and of Friant Dam to harness the San Joaquin flood waters. Both dams are now completed. Shasta Dam, whose spillways are three times as high as Niagara Falls, backs up a yearly reserve of 4,500,000 acre-feet. The dam is exceeded in bulk only by Grand Coulee on the Columbia. Friant is the country's fifth largest dam. Below Shasta is smaller Keswick Dam, which feeds the turbines that generate power to spin the pumps that push the rivers up hills.

The Shasta and Friant dams, plus the Mendota and the Madera-Kern canals, basic units in the Central Valley Project, came into full operation in 1951, when waters from Mt. Whitney's slopes first flowed onto upper San Joaquin farms.

Shasta Dam has functioned for flood control since 1945, when it was completed and when powerhouse turbines began generating electricity.

Last year Shasta Dam waters, released down the old river channel to mingle with those of the

Feather, the Yuba, the American, and other Sierra Nevada streams feeding into the Delta cross channel, were picked up by the huge pumps at Tracy and boosted into the Madera Canal for gravity flow up the San Joaquin Valley. At the same time, Friant Dam waters were ready for delivery, via canals, to irrigators in the upper San Joaquin Valley. To accomplish this, the Reclamation Bureau had spent more than \$388,000,000 in federal funds on dams, powerhouses, pumping plants, canals and property rights, and had earmarked \$162,000,000 more to complete the system.

The Central Valley Project has harvested some political and economic nuts even harder to crack than the engineering problems of moving rivers. Californians first accepted the WPA funds with the understanding that the federal Government was giving them a helping hand. Then, as the U. S. Reclamation service invested more millions, the State Water Authority found itself eased out of the picture.

The Central Valley Authority, with headquarters in Sacramento, Chico and Fresno, built up a staff of 2,800 people employed not only to engineer the dams, powerhouses, and canals, but to operate them as well and sell water and power to Californians indefinitely. Thus the Californians lost control of their rivers and waters, at least so far as the Central Valley was concerned.

To complicate matters, the CVA administrators concluded that the provisions of the U. S. Reclamation Act, passed half a century ago to convert desert areas into productive farm lands, applied equally to the irrigation districts to which they proposed to sell water captured by the Shasta and Friant dams. These provisions limited each farmer to ownership of 160 acres, or 320 acres for a man and his wife. Though many Central Valley farms fell within the arbitrary limit, many others were larger and were planted to crops that could be grown economically only on larger acreages.

The CVA wholesaled water to already established irrigation districts, many of them in existence half a century or more, but in the contracts the irrigation district managements had to agree to see that their farmer-members divested themselves within ten years of surplus acreage. Fifteen out of 137 irrigation districts have signed up for water under protest, hoping that before the ten-year limit is up, Congress will change the old reclamation law, or the Supreme Court

will rule that it does not apply to areas that have been farmed, in some instances, for generations.

Meantime the aroused Californians have embarked on a program for regaining control of their rivers and waters by buying out the federal Government. Last year the legislature authorized State Engineer A. D. Edmonston to figure out how this could be done. In March of this year the Edmonston Report to the legislature stated that the purchase was feasible if Californians would bond themselves for upwards of \$300,000,000 to pay off Uncle Sam.

The exact sum is subject to negotiation, because some of the investment in dams is chargeable to flood control, which is a federal responsibility. The CVA has indicated a willingness to get out if the federal Government is adequately compensated. The state legislature has appropriated \$10,000,000 for the State Water Authority to launch purchase proceedings. Some Californians, including the governor, have their doubts about the scheme, pointing out that in view of the whopping federal taxes paid by Californians, they are entitled to have some of their tax moneys spent on water conservation.

The Central Valley and Southern California river-moving projects already under way or on the drawing boards will harvest roughly two thirds of California's 71,000,000 acre-feet of rainfall. Much of the rest of the state's rain crop falls in the watersheds of a dozen smaller rivers on the north coast, where the Klamath, Smith, Eel, Russian, to mention a few, empty into the Pacific Ocean each year. Saving this wasted water calls for tunnels and channels through precipitous north coast mountains that will turn westward-flowing streams around and divert their waters into the Sacramento Valley, where they could be captured by dams and fed into the canal system that supplies the Great Interior Valley and the burgeoning population of Southern California.

Though some of these long-time river-moving plans are in the day-dream stage, they are no more fantastic today than was the lifting of the Colorado over the mountains into Southern California a quarter century back. To the water engineers, river moving is as feasible as the population and the industry that will pay the bill. Someday it will be merely good business to capture every drop of rain, no matter where it falls, and move it where it is needed.



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Are You Your Favorite Author?

(Continued from page 47)

making himself late to the office and losing another pound every time the mail proves to be the usual assortment of advertising matter and bills.

But the tremendous morning arrives at last. There is a telegram from the agent: "Your grand book accepted by B & I check and contract follow warmest congratulations."

The contract is all smeared with double talk, like a kid's face with jam, but Mr. Average doesn't notice. He signs and returns it abstractedly, because he is very, very busy looking at the check with the figures "\$450" on it—a \$500 advance minus the agent's ten per cent.

There is a hearty letter from Barabbas himself, so revoltingly hearty you can smell the heather of his tweeds and the English tobacco from his pipe. Then comes a fat package with the truest excitement of the whole venture—Mr. Average's prose in the flattering type of the galley proofs.

The roseate dreams have blossomed by now. Mr. Average wallows in them. No more knocking himself out at the Last National Bank. Winter in Capri, doing the next book between sneaky glances at the contents of French bathing suits. A lodge in Quebec for summer. Groton and Harvard for Average, Jr., Wellesley and a debut for little Jocelyn. Mink for the little woman, who has stood by—Hell! She's been magnificent! Get her sable!

The week before publication Mr. Average subscribes to a clipping agency's services. He neglects to instruct the agency not to send duplicates—such as the canned reviews of the news services and the feature syndicates—and before he can stop the flood he has spent a dime per clipping for dozens of examples of one reviewer's job.

The reviews, in the main, are good. But Mr. Average cannot find out how his book is going. He writes the publisher, who always thanks him for "your good letter of the twelfth," but doesn't say much.

The curtain will be lowered to denote a passage of six months.

The first royalty statement arrives. "The Ninety Lives of 'Catfish' Cain" has sold exactly 1,265 copies at \$4—a gross of \$5,060. With the \$500 advance deducted from his ten per cent royalty, there

should be a balance of \$6. But what is this? "Corrections by author—\$68.90." Mr. Average reads his contract and there, sure enough, is the clause, "The author shall be entitled to \$30 worth of corrections but shall pay for all in excess of that." Little did he know, as he polished his prose in the galleys, that he was paying for it, and he winds up his first half-year as an author \$62.90 in the red.

Now all of this may seem the wildest exaggeration, but it is as true as blue. Mr. Average has done better than most, in fact, to have sold 1,265 copies. Nobody knows for sure, but the average sale of what is known as a "trade" book—this excludes texts, technical works and the like—has been estimated to be 800 copies.

Having bled and died with Mr. Average, let us take as close a look as we can at the publishing business, which is as secretive as Penrod Jashber Schofield's detective agency.

In 1951 there were 8,765 new books published in this country. There were 2,490 reissues—either hard-cover new editions of books from previous seasons or editions



in a cheaper format, such as the 25 and 35 cent pocket books. That was the competitive field Mr. Average entered so innocently.

The evasiveness Mr. Average encountered in his letters to Barabbas is typical. It is literally impossible to get accurate statistics on book sales. The publishers simply won't talk; even the Publisher's Weekly, top trade organ in the field, admits that for years it has been unable to penetrate this iron curtain. But seasoned veterans in the publishing business guess that fewer than 100 books sell in excess of 10,000 copies, bringing to fewer than 100 authors an income of \$3,000 or more.

Barabbas & Iscariot, like all other publishers, is a hardheaded business firm, rather than the epitome of Ambrose Bierce's definition, "A publisher is a man who drinks champagne out of an

author's skull." Sure, it publishes too many books in a season and some of them are dreadful. But it must have a fixed list (don't ask why; nobody knows for sure), and if one author hits a jackpot—the Book-of-the-Month, say, or a freak runaway sale—the return will pay a substantial investment on the season's output.

In Mr. Average's case, his book appeared just as a novel hit the top of the best-seller list and went into a fifth printing; Barabbas & Iscariot virtually ignored Mr. Average and concentrated on promoting the prize goose.

Publishers themselves will admit to bringing out more books than they should. The standards are not at all high, in a literary sense; a mediocre book may have to go to 30 publishers before it is accepted, but if the author is stubborn enough he can sooner or later blossom forth in covers.

This is in no sense a critique of the publishing business. It is, rather, an attempt to play angel to the fools who would rush in. It is written, moreover, in the full knowledge that the fools will not be warned off; after all, its author published several books himself, in the face of dire predictions from such authorities as Henry Louis Mencken and Maxwell Perkins.

So, if you are bound and determined to write a book, give your morale some boxing lessons and consider what you're up against.

First, try and get an agent. He will more than earn his ten per cent by protecting you in the clinches. He will wrestle the publisher three falls to a finish on one of the standard gouges—the attempt to take 50 per cent or more of your subsidiary rights, such as movies, second serial, foreign and TV-radio. If you deal with the publisher direct you are likely to be caught by his sob-filled song-and-dance about the great gamble he is taking, and find yourself giving up the lion's share of your rights. A good agent will spare no adjectives in telling the publisher that his function is to bring out a book and not to grow fat on the book's by-products.

You have now seen it all. If you still think you are made of the sternest stuff, go ahead and write your book. Be resigned to the worst; tell yourself it will not be published, or if it is, it will not sell more than 500 copies.

And try to save yourself the chagrin of witticisms from friends you have not seen recently such as:

"Hello Larry. Published any more top-secret books lately?"

nb notebook

Pictures show the team

AS A BUSINESS grows bigger, its people grow further apart, a phenomenon that offers company executives one of their severest headaches. It is difficult to make the trim girl filing papers in the head office understand that she and the roustabout in a California oil field are both members of our "big, happy family."

H. S. M. Burns, president of Shell Oil Company, may not have a complete solution to this dilemma, but he has had an ingenious try at getting the two horns together. His company has just sponsored a book, "The Oil Man," which tells the company story through photographs of individuals.

The girl with the papers and the roustabout are in it. So are men looking for oil, men leasing land to drill on, men building pipe lines, running refineries, doing research in laboratories.

And the brief text talks about the people rather than the company. After a short excursion through the book's 174 photos—selected from the 4,000 actually taken—people who work for the company, or people who don't, will have a better understanding of how American industry operates.

Police with civilian help

A CITIZENS' advisory committee, with no official status, is proving a real help to the police department of San Jose, Calif., according to the International City Managers' Association.

The group has 29 members, 16 named by the city manager and police chief, 13 named by the original appointees. The clergy, merchants' associations, P-TA, radio, labor, veterans' organizations, and other groups are represented.

The committee's purpose is to foster a closer relationship between the police department and the citizens; to stimulate interest in public education programs; to poll factual information; to explain police measures to control

vice and criminal activity, and to act as consultees on policies the administration suggests.

Teaching by comic technique

THE COMIC BOOK'S merits, or lack of them, have provided some brisk social argument over the past few years. Most of it centered on content. Nobody seemed to deny that this format provided a lively way to tell a story and that the comic book was a truly American form of art—two facts which several acute observers recently have put to work.

The results demonstrate that an American art form, properly used, is an excellent medium for telling the American story.

One example is "Johnson Makes the Team," a 32-page cartoon booklet which the B. F. Goodrich Company has distributed along with a special teachers' manual for use in upper grades, junior and senior high schools.

Another is "The Man Who Stole Your Vote," produced by the National Research Bureau of Chicago, first of a series of four, all designed to inspire stay-at-home voters to go to the polls.

But perhaps the most ambitious project is that of the Institute of Fiscal and Political Education, a nonprofit educational organization, chartered by the New York State Board of Regents to promote "the broadest possible public understanding of technical and practical problems in fiscal and political fields."

To carry out the purpose, the Institute has adapted the comic book technique to a series of folders in which leading congressmen discuss the issues of the day. In early numbers of the series, Senator Cain discussed the Taft-Hartley Law; Senator Taft discussed the Constitution; Senator Capehart, "Selling America"; Senator Byrd, economy; Senator Maybank, inflation; Senator Hennings, flood control, and Senator Kefauver, the basketball scandal.

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For the name of your nearest Indiana Desk dealer — for help in your office planning, write Indiana Desk Company, Inc., Jasper, Indiana.

*This is Indiana Desk Model 3014, the Sheraton Line. Indiana produces a full line of fine office furniture in many styles to fit your needs.

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phlet is issued every two weeks, with Republicans and Democrats alternating as interviewees. For the coming year, the articles of the Constitution will serve as a general subject to be covered in a way that will emphasize issues of the day rather than specific legislative matters.

The booklets are intended for employes of corporations, the corporations subscribing and sending a list of their personnel to Institute headquarters at 122 East 42nd Street, New York, 17.

The cost to the corporations, which is tax deductible, is \$3 per subscription.

Among the Institute's trustees are: Dr. Wilson M. Compton; Dr. John Lee Coulter, former member U. S. Tariff Commission; J. Hugh Jackson, former president Kiwanis International; Arthur Bliss Lane, former ambassador to Poland; Dr. Felix Morley; and Gill Robb Wilson.

Yearbook advertising that paid

THE EAGER young amateur who calls to sell advertising in the school yearbook seldom knows how unwelcome he really is. Space in the yearbook is a waste of advertising money. No space in the yearbook is a loss of good will among the whole senior class.

But, in Stamford, Conn., Pitney-Bowes, Inc., last spring, doubled its space in the high school yearbook—and made it pay.

The company has always taken a full page for an editorial advertisement designed to help better relations between industry and education.

This year it took a two-page spread, but before writing the copy it sent a letter to the 474 members of the senior class asking them to answer:

"What is the one question you would most like to ask the president of an industry like Pitney-Bowes, if you could talk with him in his office alone?"

Two hundred and fourteen seniors responded. The question which led all the others was: "What qualifications do I need to get a good job and advance?"

A frank answer to this by W. H. Wheeler, Jr., company president, gave Pitney-Bowes striking copy for its yearbook ad.

It also gave Wheeler a genuine thrill.

"Here," he said after reading the questions submitted, "is an oncoming generation which seems to be confounding the cynics and crepe-hangers who claim that

youth is excessively concerned with security, is collectivist in its thinking and antibusiness in its outlook. On the contrary, this response shows an overwhelming interest in opportunity, in getting ahead—with nothing that could be construed as antagonistic, bitter and resentful. If you could leaf through the returned questionnaires you would find impressive evidence of their faith in the future of this thing we call American Free Enterprise."

Students may go abroad

MORE than 38,000 opportunities are offered this year to students for study in countries other than their own, according to the new edition of "Study Abroad," an international handbook of fellowships, scholarships and study grants released by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

American students are eligible for more than 5,000 fellowships in 38 countries. Grants range from tuition or maintenance costs only to a year's study in fine arts in Italy (with an allowance of \$3,000 plus living quarters); a year's study in social sciences in Switzerland (\$1,000); a year in the Belgian Congo (\$2,000-\$4,000).

The U. S. Government offers 225 scholarships stipulating veterans' preference for advanced research or lecturing abroad.

For the first time this year, Bolivia, Greece, Monaco, Nicaragua, the Saar and Yugoslavia are offering scholarship programs—bringing the number of countries making such offers to 60.

"Study Abroad" shows where students may apply for these grants and gives detailed information about qualifications, subjects and countries for study.

Education in business skills

IN AN ABANDONED public school house built in 1888, Dr. Robert A. Love, with the help of 100 trade associations and numerous business firms, is proving that business skills that take years to learn on the job, can be taught in a college classroom in a few weeks.

Dr. Love directs the intensive business training courses at City College of New York.

He speaks from five years of experience during which some 23,000 men and women have taken intensive business training courses. One wholesale hardware company in Minnesota has just sent its fifth group of eight employes to take the

one-month course, paying both tuition and expenses.

In setting up the courses, Dr. Love explains, "we undertook to determine the precise educational requirements of business. We learned that literally hundreds of fields within business call for professional training and specialized skills.

"These fields included advertising, marketing, sales promotion, salesmanship, insurance, record-keeping, real estate and so on. In addition, we saw that skills had to be applied differently in each industry. Problems in food retailing, for example, differ from those in ready-to-wear.

"As a result we developed a three-dimensional program of adult education which includes training for a specific job; training to meet requirements of a specific industry; training to meet the requirements of a particular company."

Trade associations helped develop the courses and to enlist some 900 business executives as instructors.

"Now," says Dr. Love, "business has seen how training can promote the rapid development of an employee's abilities.

"Education has seen how business will cooperate with a realistic program. Both have gained from the experience."

Demerits for drivers

NEW JERSEY has joined Connecticut and Washington State in using a "report card" system for automobile drivers.

The plan, as the American Public Works Association describes it, is this:

Every driver involved in an accident will score a certain number of points. When he accumulates 12 in a three-year period, he will face the state director of motor vehicles who is empowered to revoke his license for three years. At the end of this period, he will receive a red drivers' license, calculated to remind him that he should always drive in such a way that he won't have to show it to a policeman. If he does, it may be revoked immediately.

The table of violations, with their cost in points, reads like this: Driving while drunk, 12; responsibility for a fatal accident, 12; leaving the scene of an accident, eight; reckless driving, six; speeding, four; other violations, except parking, three; three convictions within 18 months, an additional three.



Pete Progress and the driver who went around in circles

"Why don't you look where you're walking?" shouted an irate voice.

Pete jumped back on the curb, just in time to see an old jalopy turn on two wheels into Main Street.

He shook his head, and kept on walking. Suddenly that same irate voice shouted again, "Hey, you, look where you're walking!"

"Wait a minute, mister," yelled Pete. "What goes here anyhow?"

The car pulled to a stop with a screech. "I'll tell you what goes," said the driver. "Me, I'm going crazy."

"How come?" asked Pete. "You look all right to me. Maybe high blood pressure, but nothing worse."

"I've been going 'round and 'round the block for an hour now," said the driver, "and I still can't find a place to park."

"Why don't you make one?" said Pete.

"Make one! Now, you're the one who's off his rocker," said the driver. "I'm no engineer. This is no bulldozer I'm driving."

"No, I know it," said Pete, "but if this town needs better parking facilities, it must trouble a lot of other people, too. Why don't you talk to them and do something about it?"

"I'm no good at making speeches," said the driver. "I'm just an everyday guy. But I'll gladly give my time. I'll have time, too, if I can find a place to park."

"Why," said Pete, "if you're that ready to give instead of to take, you're ready to go down and talk to the boys at the chamber of commerce."

"Talk to them? I'll join 'em!" said the driver. "Hop in, I'll have you down there in a jiff."

"No thanks, I'll walk," said Pete. "Don't forget, you have to park."

Your chamber of commerce is working for you. Why don't you help them?





BROAD CONTRACTS NEED BROAD VISION

WHEN, in the course of the United Steelworkers' strike, Pres. Philip Murray told his wage policy committee, "there just isn't any group or citizen in this country big enough to whip this union," he may have described his organization's greatest weakness.

This country's folklore is rich in stories about what happened when the citizens decided that men or institutions had grown too strong for their—or the country's—good.

In many quarters the diet of unions is already being examined: "Upon what meat doth this, our Caesar, feed . . .?"

ACCORDING to a growing body of public opinion, a large portion of the sinew which supported the coal strike, the oil strike, the rail strikes and the repetitious coal strikes is nourished by the practice of industry-wide collective bargaining or of "pattern-bargaining" which arrives at approximately the same result by using a contract negotiated with one company in an industry—automobiles, for instance—as a key in dealing with other companies.

"This form of bargaining," says Prof. Leo Wolman, "has already had far-reaching effects on the

wage structure. In the steel and automobile industries long-standing wage differentials in favor of plants in small towns and rural communities and of small and new businesses have been eliminated. . . . When the inflation ends, as it always does, we may expect these policies of national unionism and national bargaining to shrink the total volume of employment and to divert to the larger industrial centers a good deal of what employment is left."

Efforts to prevent the business and job casualties that Professor Wolman foresees will make industry-wide bargaining a crucial issue in the near future.

Already two bills which would limit the area of collective bargaining have reached Congress. One, the Ball Amendment to the Taft-Hartley Act, passed the House and failed by only one vote in the Senate. It would have limited the certification of bargaining agents to unions representing solely the employees of one employer or several employers within the same metropolitan district or county. The other, recently introduced in the House by Rep. Wingate H. Lucas of Texas, would make industry-wide bargaining an unfair

labor practice of both industry and labor—with certain exceptions.

This need for "certain exceptions" reflects the complexity of the problem. Because of it, most people agree that eliminating language which exempts labor monopolies from the Sherman Act is not a handy solution. The Sherman Act is a few brief paragraphs. Its effectiveness rests in several volumes of interpretive regulations which apply to business—but would need to be rewritten to fit the different organizations, aims and operations of unions.

A further complication is that industry-wide bargaining is not completely evil.

Although it has gained its widest use—and misuse—since World War II, it was not born of the war, nor even of the National Recovery Administration codes which frequently set up the framework of industry-wide bargaining by providing some sort of minimum wage standard.

AN employers association in the pressed or blown glassware industry developed what is probably the oldest collective bargaining arrangement in 1888—and has not had a strike since. The 1946 agreement between the Anthracite Coal Operators and the United Mine Workers of America (AFL) is a compilation of resolutions, revisions, rulings and decisions dating back to 1903.

Today, according to the Department of Labor, more than 4,000,000 workers are covered by agreements negotiated between trade unions and associations or groups of employers—some national, some state-wide, some like the San Francisco Employers' Council formed in 1939, covering only a single city.

Many of these groups maintain comparatively trouble-free—certainly publicity-free—relations with one or several unions. The critics of industry-wide bargaining are aware of this. This awareness should be reflected in the discussions when the question reaches Congress.

But business, as well as other groups, has learned that, when the public is frightened, it can act hastily without weighing complexities, or considering who may get hurt.

Murray should remember this when he flexes his muscles. He might frighten the public.



Picture above shows typical operation of Dodge "Job-Rated" trucks owned by Blue Plate Foods, Inc., New Orleans, La.



"Our Dodges sure deliver the goods!"

... says **CHARLES A. NEHLIG**, Blue Plate Foods, Inc., New Orleans, La.

"We know that Dodge is a *good* truck. It's the *right* truck for our job. It has the right size engine—one that fits our job for power without waste.

"Our Dodge 'Job-Rated' trucks fit our job in every other way, too. They're well-balanced, well-built. And if they didn't fill the bill for us, you can bet we wouldn't have so many of them. Yes, our Dodges sure deliver the goods!"

What Mr. Nehlig says is typical of enthusiastic comments by owners of Dodge "Job-Rated" trucks. Remember, there's one to fit your job! See your nearby Dodge dealer.



"Our men average 35 stops per day and they sure like the way Dodge 'Job-Rated' trucks ride and handle. In fact, our business depends on *good* trucks and *good* men—on the daily performance of over 300 Blue Plate Foods salesmen and the trucks they drive."



"When you operate as many trucks as we do, the trucks have to be *good*. They have to be economical with gas and oil. They have to stand up well in hard service. And they have to have good, safe brakes of the right size. Our Dodge trucks meet *all* these demands!"

DODGE "Job-Rated" TRUCKS



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